

Bill Rose

**Water Resources Data
for
Wisconsin
Water Year 1976**



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT WI-76-1

Prepared in cooperation with the State of Wisconsin
and with other agencies

CALENDAR FOR WATER YEAR 1976

1975

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1976

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for
Wisconsin
Water Year 1976**



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT WI-76-1

**Prepared in cooperation with the State of Wisconsin
and with other agencies**

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

V. E. McKelvey, Director

Prepared in cooperation with

Wisconsin Department of Natural Resources
Wisconsin Department of Transportation
The University of Wisconsin-Extension,
Geological and Natural History Survey
Southeastern Wisconsin Regional Planning Commission
Douglas County
City of Madison
City of Middleton
Corps of Engineers, U.S. Army

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Madison, Wisconsin 53706

PREFACE

This report was prepared by personnel of the Wisconsin district of the Water Resources Division of the U.S. Geological Survey under the supervision of W. W. Barnwell, District Chief, and J. T. Callahan, Regional Hydrologist, Northeastern Region. It was done in cooperation with the State of Wisconsin and with other agencies.

This report is one of a series issued by State. General direction for the series is by J. S. Cragwall, Jr., Chief Hydrologist, U.S. Geological Survey, and G. W. Whetstone, Assistant Chief Hydrologist for Scientific Publications and Data Management.

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GAGING STATIONS, IN DOWNSTREAM ORDER, FOR
WHICH RECORDS ARE PUBLISHED

VII

[Letters after station name designates type of data:
(d) discharge, (c) chemical, (b) biological, (m) microbiological,
(t) water temperature, (s) sediment, (r) radiochemical]

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WATER RESOURCES DATA FOR WISCONSIN, 1976

INTRODUCTION

Water-resources data for the 1976 water year for Wisconsin include records of streamflow at gaging stations, partial-record stations, and miscellaneous sites; records of reservoir storage, records of chemical, physical, and biological characteristics of surface and ground water; and records of water levels in observation wells. Records for a few gaging stations in bordering states also are included. These data are collected as part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Wisconsin.

Records of discharge (or stage) of streams, and contents (or stage) of lakes and reservoirs were published first in a series of U.S. Geological Survey water-supply papers titled, "Surface-Water Supply of the United States". Through water year 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers titled, "Quality of Surface Waters of the United States". Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers titled, "Ground-Water Levels in the United States".

Beginning with the 1961 water year and continuing through water year 1974, streamflow data have been released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records beginning with the 1964 water year, and ground-water data since the 1971 water year have been similarly released either in separate reports or with streamflow records. These reports provided rapid release of preliminary water data shortly after the end of the water year. The final data then were released in the water-supply paper series mentioned above. Beginning with the 1975 water year, water data for streamflow, water quality, and ground water were released on a State-boundary basis. These official reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report WI-76-1". These reports are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22151.

COOPERATION

The U.S. Geological Survey and organizations of the State of Wisconsin have had cooperative agreements for the systematic collection of streamflow records since 1913, for ground-water levels since 1964, and for water-quality records since 1955. Organizations that assisted the Survey in collecting data during this year through cooperative agreement are:

Wisconsin Department of Natural Resources, Anthony Earl, secretary.

The University of Wisconsin-Extension, Geological and Natural History Survey, M. E. Ostrom, state geologist and director.

Douglas County Soil and Water Conservation District, Paul Brown, chairman.

Dane County Regional Planning Commission, Charles Montemayor, executive director.

Wisconsin Department of Transportation, Zel Rice, secretary, and W. A. Kline, chief bridge engineer.

Southeastern Wisconsin Regional Planning Commission, K. W. Bauer, executive director.

City of Middleton, Judith Karofsky, mayor.

City of Madison, A. E. Milke, city engineer.

Assistance of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for 23 gaging stations and 11 water-quality stations and the National Park Service, U.S. Department of the Interior, in collecting records at 9 water-quality stations published in this report.

The following organizations aided in collecting records:

Wisconsin Valley Improvement Co., Lake Superior District Power Co., Wisconsin-Michigan Power Co., Wisconsin Public Service Corp., Northern States Power Co., Dairyland Power Cooperative, Wisconsin Power and Light Co., Nekoosa-Edwards Paper Co., Wisconsin River Power Co., and Milwaukee County Park Commission.

Organizations that supplied data are acknowledged in station descriptions.

DEFINITIONS OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data used in this report are defined below. See also table for converting English units to International System of Units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or 325,851 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multicelled plants, containing chlorophyll and lacking roots, stems, and leaves.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform essential roles in nature in the recycling of materials; for example, decomposing organic matter into forms available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (culture medium). Their concentrations are expressed as number of colonies per 100 milliliters (ml) of sample.

Fecal coliform bacteria are bacteria that are present in the intestine of warmblooded animals. They are used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on FC medium (culture medium). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, spherical bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms that produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterococcus medium (culture medium). Their concentrations are expressed as number of colonies per 100 ml of sample.

Bed material is unconsolidated bottom material of a streambed, lake, pond, reservoir, or estuary.

Benthic macroinvertebrates are animals inhabiting the bottom of an aquatic environment. They include a number of different types of organisms, such as insect larvae and nymphs, snails, clams, and crayfish. They are frequently used as indicators of environmental quality because many have restricted mobility during their aquatic life phase, as well as a relatively long lifespan which allows for response to prevailing and changing water-

quality conditions. Many benthic organisms inhabit specific types of aquatic environments which, if changed, result in changes in the composition of the benthic community.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, used by microorganisms, such as bacteria, for the decomposition of organic matter.

Biomass is the amount of living matter present at any given time, expressed as the weight per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry weight determination has been ashed at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in g/m³ (grams per cubic meter), and of periphyton and benthic organisms in g/m² (grams per square meter).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.9835 acre-feet, 646,000 gallons, or 2,447 cubic meters.

Chlorophyll is the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Contents is the volume of water in a reservoir or lake. Contents herein is that of a reservoir or lake and, unless otherwise indicated, is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT³/S, ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second, 448.8 gallons per minute, or 0.02832 cubic meters per second.

Discharge is the volume of fluid plus suspended sediment that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic average of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a given time.

Dissolved refers to the amount of a substance present in true chemical solution. In practice, however, the term includes all forms of the substance that will pass through a 0.45-micrometer membrane filter, and thus may include some very small (colloidal) suspended particles.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Values of drainage area given herein include closed basins and noncontributing areas within the basin as noted.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the general term "stage", although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, lake, or reservoir where systematic hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable principally to the presence of calcium and magnesium and is expressed as equivalent calcium carbonate (CaCO_3).

Hydrologic unit is a geographic area representing part or all of a surface-drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per gram (UG/G, ug/g) is a unit expressing the concentration of chemical constituents as the mass (micrograms) of constituent per unit mass (gram) of sediment.

Micrograms per kilogram (UG/KG, ug/kg) is a unit expressing the concentration of chemical constituents as mass (micrograms) of constituent per unit mass (kilogram) of sediment.

Micrograms per liter (UG/L, ug/l) is a unit expressing the concentration of chemical constituents in solution as the mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter.

Milligrams per liter (MG/L, mg/l) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per liter of water-sediment mixture.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample volume, usually milliliters (ml) or liters (l).

Partial-record station is a site where limited streamflow or water-quality data are collected systematically over a period of years.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report is based on recommendations of the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.004	Sedimentation.
Silt.....	.004 - .062	Sedimentation.
Sand.....	.062 - 2.0	Sedimentation or sieve.
Gravel.....	2.0 - 64.0	Sieve.

The particle-size data given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticides are chemical compounds used to control undesirable plants and animals and include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate from or release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often are a nuisance in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/ml of sample.

Green algae have chlorophyll pigments similar to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells/ml of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food chain. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar structurally to organochlorine insecticides.

Runoff in inches (IN, in) is the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are topography, geology, soil type, land cover, land use, and quantity and intensity of precipitation.

Suspended sediment is the sediment that is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment discharge is the quantity of suspended sediment passing through a stream cross section in a unit of time. It is computed by multiplying water discharge times suspended-sediment concentration times 0.0027.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to approximately 0.3 ft above the streambed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/l).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Sodium-adsorption ratio (SAR) expresses the relative activity of sodium ions in exchange reactions with soil.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the concentration of dissolved solids in the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance.

Stage-discharge relation is the relation between gage height (stage) and the volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Natural substrate refers to any naturally occurring emerged or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device placed in a stream or lake for colonization of organisms. The use of artificial substrates simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and polyethylene strips for periphyton collection.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with kingdom and ending with species. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of the dragonfly *Anax junius* is:

Kingdom.....Animal
Phylum.....Arthropoda
Class.....Insecta
Order.....Odonata
Family.....Aeshnidae
Genus.....*Anax*
Species.....*junius*

Thermograph is an instrument that continuously and automatically records temperature. "Temperature recorder" is the term used here to indicate the presence of a thermograph that automatically records water temperatures on paper tape.

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day. It is computed by multiplying the concentration in milligrams per liter by 0.0027 times the discharge in cubic feet per second.

Total (as used in table of chemical analyses) refers to the amount of a substance that is present both in solution and in suspension.

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network is designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on river-basin accounting units designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to assess areal variability of water-quality conditions nationwide on a year-by-year basis and (2) to assess long-term changes in stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of water-quality stations where samples are collected regularly to be analyzed for radioisotopes. The streams sampled represent major drainage basins in the conterminous United States.

DOWNSTREAM ORDER AND STATION NUMBER

The order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station.

A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

Each gaging station, partial-record station, and water-quality station is identified by a station number. These numbers are in the same downstream order mentioned above. In assigning station numbers no distinction is made between partial-record stations and gaging stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the series of numbers so that new stations may be established. The complete 8-digit number for each station, such as 05407000 appears just left of the station name and includes the 2-digit part number "05" plus the 6-digit downstream order number "407000". In this report the records are listed in downstream order by parts. The part number refers to an area bounded by certain natural major drainage lines. Records in this report are in Part 4 (St. Lawrence River basin) and Part 5 (Upper Mississippi River basin). Records for a drainage basin encompassing more than one state can be arranged in downstream order by assembling pages from the various state reports by station number.

NUMBERING SYSTEM FOR GROUND-WATER DATA SITES

The ground-water data-site number is based on latitude and longitude. The number provides the geographic location of the well and is a unique number for each site. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude; the next seven digits denote degrees, minutes, and seconds of longitude; and the last two digits is a sequential number for wells within a 1-second grid. Each ground-water data site also is identified by a local number based on the cadastral-survey system of the U.S. Government. The number consists of an abbreviation of the county name, the township, range, and section, and a four-digit number assigned to the well.

EXPLANATION OF SURFACE-WATER RECORDS

Collection and computation of data

The basic data collected at gaging stations consist of stage and measurements of discharge of streams and stage, surface area, and contents of lakes and reservoirs. In addition, observations of factors affecting

the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

Rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to estimate discharges greater than those measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, and the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, such as aquatic growth, debris, or scour and fill, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables.

At stream-gaging stations where the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources, the slope method is used to compute discharge. The slope or fall is obtained by means of an auxiliary gage separated from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At stream-gaging stations when the stage-discharge relation is affected by ice the discharge is computed on the basis of the gage-height record, occasional winter discharge measurements, considering available information on temperature and precipitation, and comparable records of discharge for other stations in the same or nearby basins.

For some gaging stations there are periods without gage-height record or the recorded gage height is faulty. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent record, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins.

Data in this report include a general description of the stations and tabulations of daily and monthly figures. A table showing the daily discharge and monthly and yearly discharges is given for gaging stations on streams or canals. A monthly summary table of stage and contents or a table showing the daily contents is given for gaging stations on lakes and reservoirs. Records are published for the water year, which begins October 1 and ends September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD".

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE". In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified.

Information pertaining to the accuracy of the discharge records and to conditions that affect the natural flow of the gaging station is given under "REMARKS". For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS".

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with "EXTREMES FOR THE CURRENT YEAR"; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

Skeleton rating tables are published, immediately following "EXTREMES", for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation

or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE". Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements also are given in special tables following the tables of partial-record stations.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft³/s; to tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures above 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other data available

More detailed information than that published for most gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the district office. Also most gaging-station records are available in computer-usable form, and many statistical analyses have been made.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Surface-water samples for analyses usually are collected at or near gaging stations. The quality-of-water records follow the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured daily (specific conductance, pH, water temperature, dissolved oxygen, and suspended-sediment discharge); extremes for the period of daily record; extremes for the current year; and general remarks.

For ground-water-quality records, no descriptive statements are given, however, the well number, depth of well, aquifer, date of sampling or other pertinent data are given in the table containing the chemical analyses.

Water analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency may be due to a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field or precipitation of carbonates and determination of carbonate and bicarbonate in the laboratory.

For water-quality stations equipped with monitors, the records consist of daily maximum, minimum, and mean values for each parameter measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. Hourly values may be obtained from the district office.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small daily temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, maximum and minimum water temperatures for each day are published.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published suspended-sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, suspended-sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge. The accuracy of the sediment records, under "REMARKS", is based on completeness of the record, number of samples collected, and range in stage over which samples are collected. Suspended-sediment discharge of less than 0.005 tons/day are reported as 0.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Collection of the data

The ground-water-level data, published here, were collected from an observation-well network designed to be representative of the principal aquifers locally.

Each well is identified by a 15-digit number based on latitude and longitude and a local number provided for local needs.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above mean sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-two manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Pickett Street, Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

- 1-D1. Water temperature-influential factors, field measurement, and data presentation, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages. \$1.60.
- 2-D1. Application of surface geophysics to ground-water investigations, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages. \$1.90.
- 2-E1. Application of borehole geophysics to water-resources investigations, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages. \$1.75.

- 3-A1. General field and office procedures for indirect discharge measurements, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages. \$0.25.
- 3-A2. Measurement of peak discharge by the slope-area method, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages. \$0.20.
- 3-A3. Measurement of peak discharge at culverts by indirect methods, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages. \$0.40.
- 3-A4. Measurement of peak discharge at width contractions by indirect methods, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages. \$1.00.
- 3-A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages. \$0.30.
- 3-A6. General procedure for gaging streams, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6, 1968, 13 pages. \$0.20.
- 3-A7. Stage measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages. \$0.45.
- 3-A8. Discharge measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8, 1969. 65 pages. \$1.25.
- 3-A11. Measurement of discharge by moving-boat method, by G. F. Smoot and C.E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages. \$0.40.
- 3-A12. Fluorometric procedures for dye tracing, by J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A12. 1968. 31 pages. \$0.35. Not currently available.
- 3-B1. Aquifer-test design, observation, and data analysis, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages. \$0.70.
- 3-B2. Introduction to ground-water hydraulics-a programed text for self-instruction, by D. S. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-C1. Fluvial sediment concepts, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages. \$0.65.
- 3-C2. Field methods for measurement of fluvial sediment, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages. \$0.70.
- 3-C3. Computation of fluvial-sediment discharge, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages. \$1.15.

- 4-A1. Some statistical tools in hydrology, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages. \$0.30.
- 4-A2. Frequency curves, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages. \$0.20.
- 4-B1. Low-flow investigations, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages. \$0.65.
- 4-B2. Storage analyses for water supply, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages. \$0.75.
- 4-B3. Regional analyses of streamflow characteristics, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages. \$0.75.
- 4-D1. Computation of rate and volume of stream depletion by wells, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages. \$0.65.
- 5-A1. Methods for collection and analysis of water samples for dissolved minerals and gases, by Eugene Brown, M. W. Skougstad, and M. J. Fishman: USGS--TWRI Book 5, Chapter A1. 1970. 160 pages. \$2.40.
- 5-A2. Determination of minor elements in water by emission spectroscopy, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages. \$0.80.
- 5-A3. Methods for analysis of organic substances in water, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages. \$0.90.
- 5-A4. Methods for collection and analysis of aquatic biological and microbiological samples, by K. V. Slack, R. C. Averett, P. E. Greeson, and R. G. Lipscomb: USGS--TWRI Book 5, Chapter A4. 1973. 165 pages. \$1.95.
- 5-C1. Laboratory theory and methods for sediment analysis, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages. \$0.65.
- 7-C1. Finite-difference model for aquifer simulation in two dimensions with results of numerical experiments, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 8-A1. Methods of measuring water levels in deep wells, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages. \$0.70.
- 8-B2. Calibration and maintenance of vertical-axis type current meters, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages. \$0.40.

HYDROLOGIC CONDITIONS

Runoff for the 1976 water year was very near long-term average. Runoff was less than 90 percent of average in a small area of southwest Wisconsin (fig. 1).

Monthly mean flows of streams in much of Wisconsin were near normal in October, above normal November (Jump River at Sheldon fourth highest in 61 years) and December, and near normal the rest of the winter (fig. 2). Snowmelt increased streamflow in March and April and runoff in those months was generally above normal. Rainfall was deficient during the summer and early fall of 1976 and runoff decreased to below normal in the northwest during May and over most of the State in June. Runoff continued to decline, being below normal or deficient for most Wisconsin streams throughout the remainder of the water year. Flow of major rivers illustrates the effect of the drought. The September flow of the Fox River near its mouth was the fifth lowest since record started in 1896, the Chippewa River at Chippewa Falls was the lowest since 1888, and the Wisconsin River at Muscoda was the lowest since 1914.

As a result of the deficient runoff, reservoir levels were well below normal at the end of the water year.

In general, most monitored ground-water levels, though declining through the summer, were still in the normal range in September.

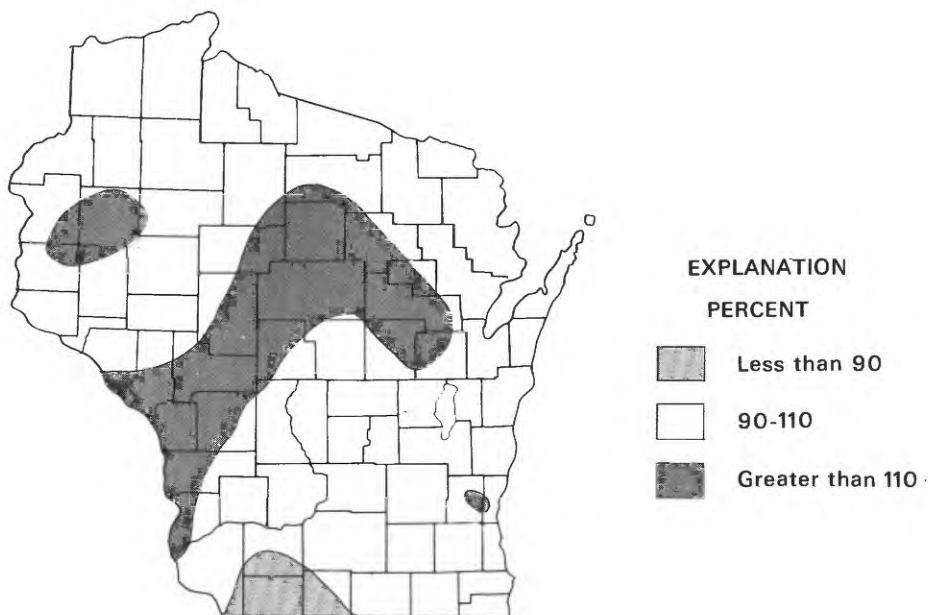


Figure 1. 1976 runoff as percent of long-term average runoff.

HYDROLOGIC CONDITIONS

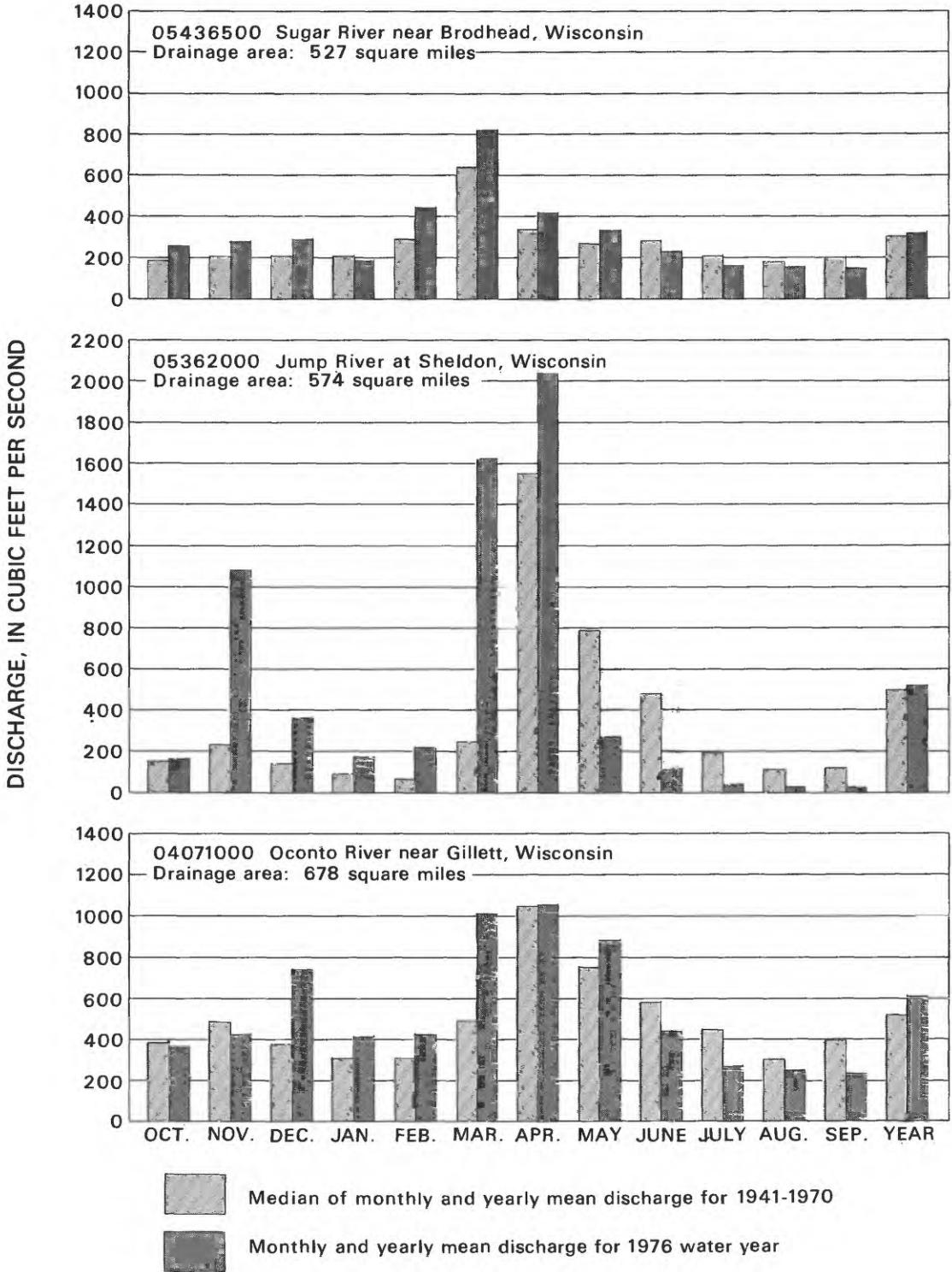


Figure 2. Comparison of discharge at representative gaging stations during 1976 water year with median discharge for 1941-1970.

HYDROLOGIC CONDITIONS

LAKE STAGE, IN FEET, ABOVE AN ASSUMED DATUM.

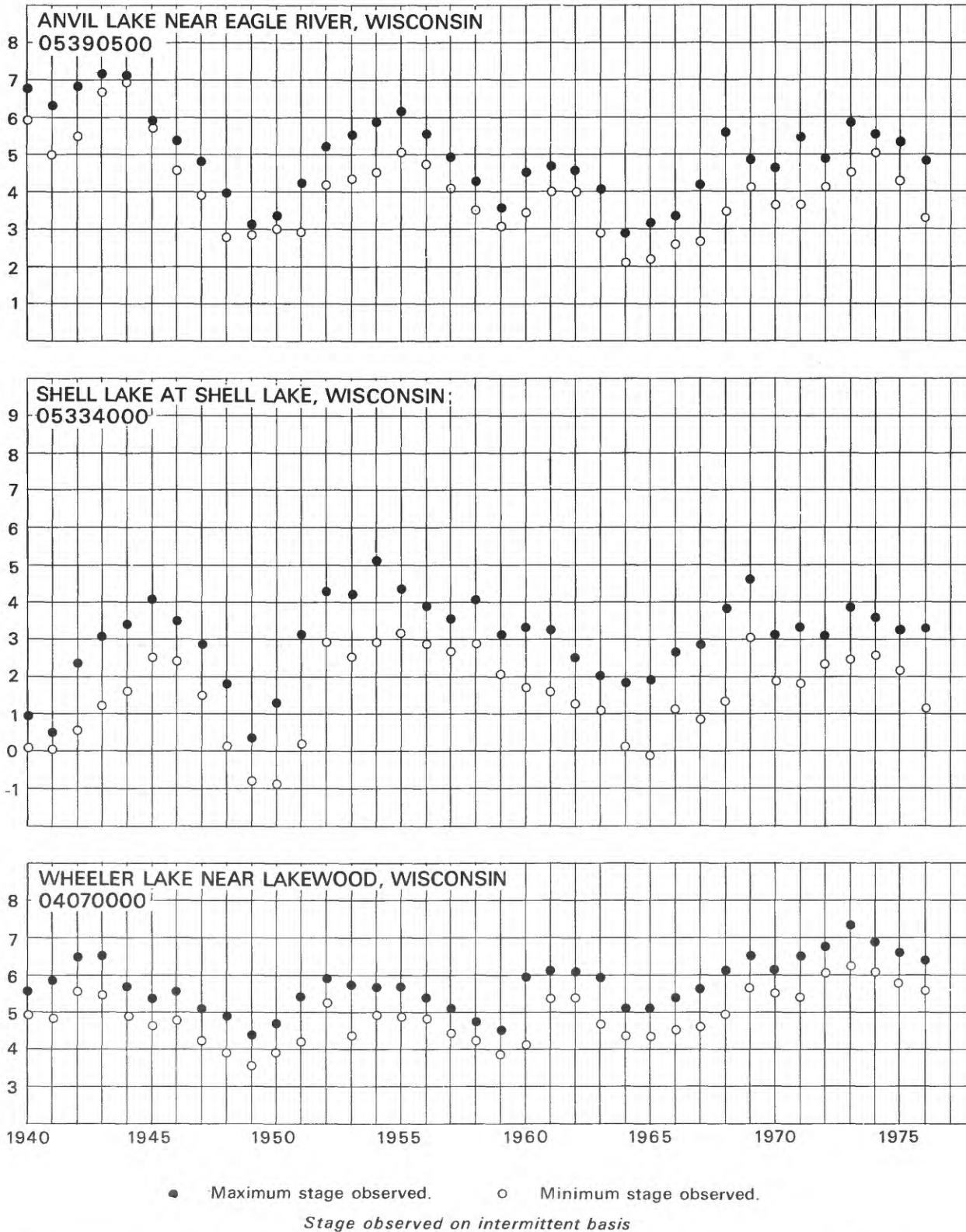
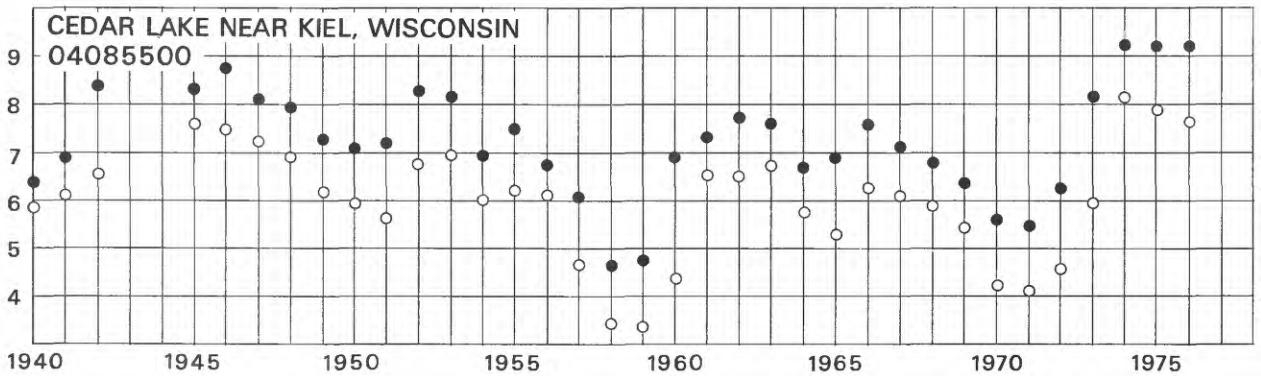
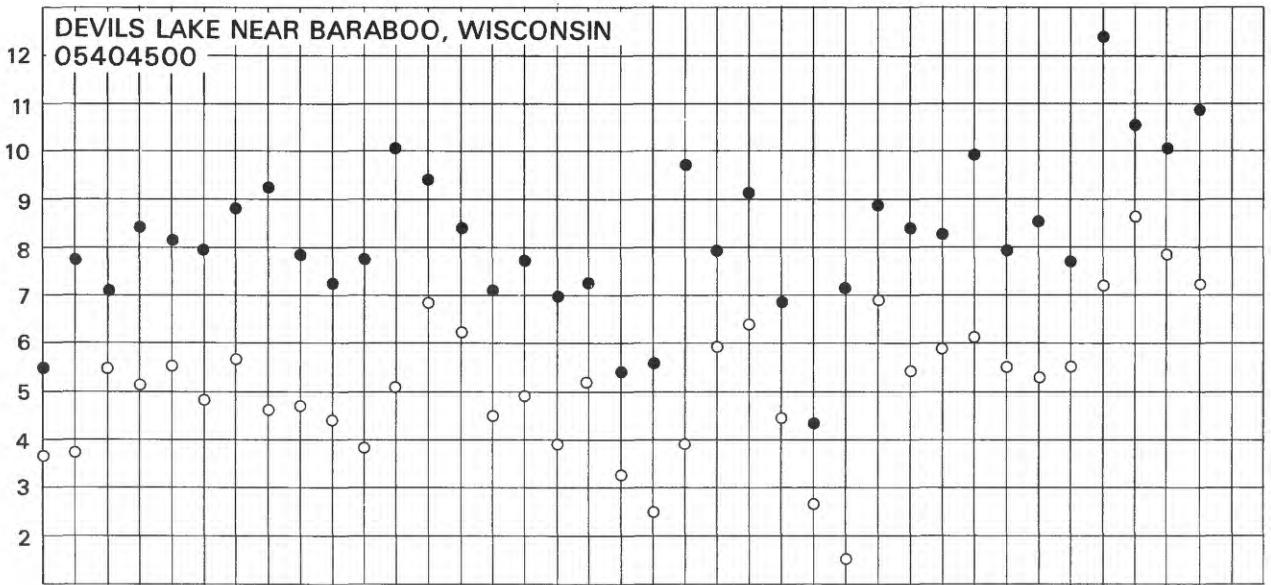
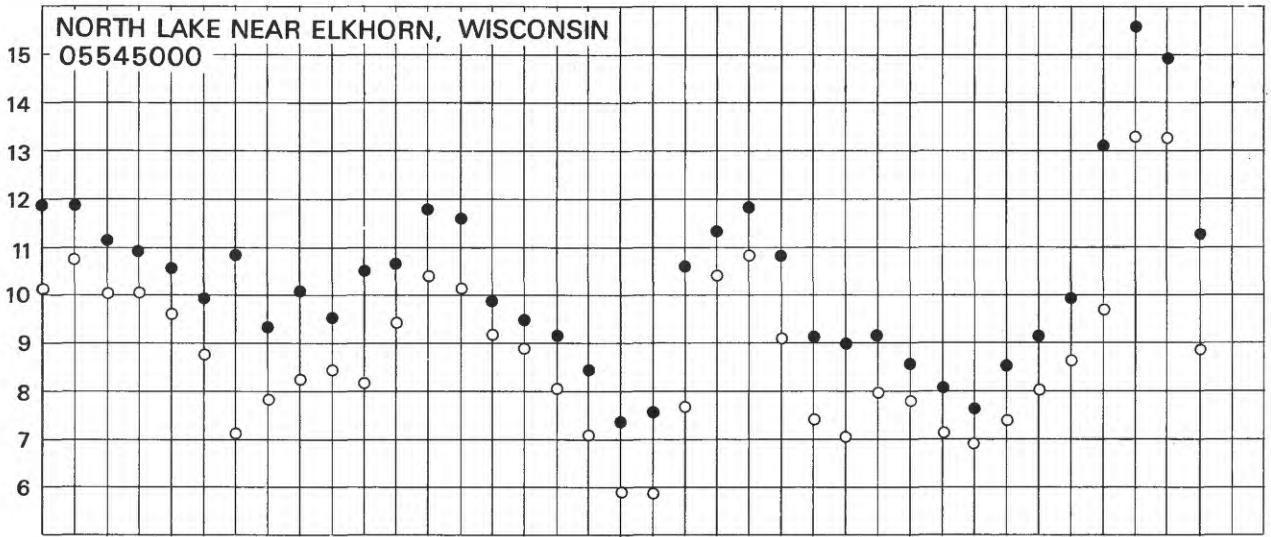


Figure 3. A comparison of extremes of stage of three northern lakes with no surface outlet for each water year since 1940.

LAKE STAGE, IN FEET, ABOVE AN ASSUMED DATUM.



● Maximum stage observed. ○ Minimum stage observed.
Stage observed on intermittent basis

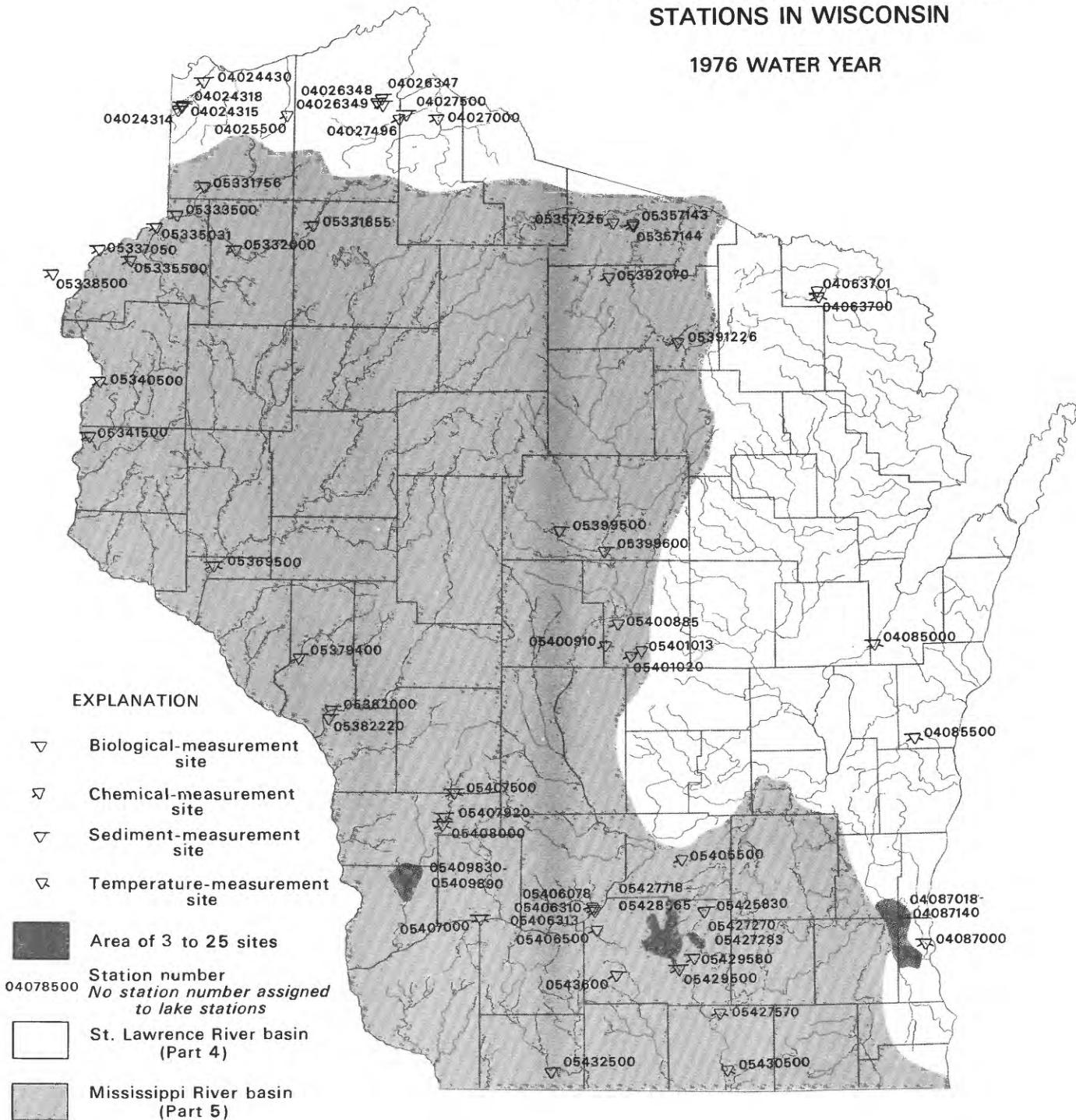
Figure 4. A comparison of extremes of stage of three southern lakes with no surface outlet for each water year since 1940.

FIGURE 5. LAKE AND STEAM-GAGING STATIONS IN WISCONSIN



FIGURE 6. SURFACE-WATER-QUALITY STATIONS IN WISCONSIN

1976 WATER YEAR



STREAMS TRIBUTARY TO LAKE SUPERIOR

04024314 LITTLE BALSAM CREEK AT PATZAU, WI

LOCATION.--LAT 46°29'43", LONG 92°13'47", IN NE 1/4 SW 1/4 SEC.3, T.46 N., R.15 W., DOUGLAS COUNTY, HYDROLOGIC UNIT 04010301, NEAR LEFT BANK, 20 FT (6 M) UPSTREAM FROM SEVERSON ROAD, AT PATZAU, AND 1.2 MI (1.9 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--4.88 MI² (12.64 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--JANUARY TO SEPTEMBER 1976.

GAGE.--NONRECORDING GAGE AND CREST-STAGE GAGE. ALTITUDE OF GAGE IS 900 FT (274 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD AND THOSE BELOW 2.0 FT³/S (0.056 M³/S), WHICH ARE FAIR.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE DURING PERIOD JANUARY TO SEPTEMBER, 65 FT³/S (1.84 M³/S) MAR. 30, GAGE HEIGHT, 6.55 FT (1.996 M); MINIMUM, 0.75 FT³/S (0.021 M³/S) JULY 17, 18, SEPT. 17-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				1.9	1.7	3.1	50	4.8	1.0	1.4	.98	.86
2				1.9	1.7	3.0	53	5.0	1.0	1.3	.92	.86
3				1.9	1.7	2.8	44	4.6	1.0	1.3	.98	.86
4				1.9	1.7	2.7	38	3.8	1.1	1.3	1.0	.86
5				1.9	1.7	2.6	35	2.8	1.1	1.2	1.1	.86
6				1.8	1.7	2.5	43	2.6	1.1	1.2	1.1	.86
7				1.8	1.7	2.4	36	2.3	1.3	1.2	1.1	.80
8				1.8	1.8	2.4	31	2.0	1.3	.86	1.1	.80
9				1.8	1.8	2.4	29	1.7	1.4	.80	1.0	.80
10				1.8	1.8	2.4	29	1.7	1.8	.86	1.1	.86
11				1.8	1.8	2.4	21	1.6	1.7	.92	1.1	.80
12				1.8	1.8	2.5	15	1.1	1.6	1.0	1.0	.80
13				1.8	1.8	2.7	13	1.0	1.8	.86	1.0	.80
14				1.8	1.8	2.5	14	1.0	1.6	.92	1.0	.80
15				1.8	1.8	2.4	13	1.0	1.6	.92	1.0	.80
16				1.8	1.9	2.5	10	1.0	1.6	.80	1.0	.80
17				1.8	1.9	2.4	8.8	1.0	1.4	.75	.92	.75
18				1.8	1.9	2.4	11	1.0	2.8	.75	.98	.75
19				1.8	2.0	2.9	9.2	1.0	2.0	.98	.98	.75
20				1.8	2.1	4.5	7.4	1.1	1.6	1.2	.98	.75
21				1.7	2.1	6.0	6.0	1.1	1.3	.86	.92	.75
22				1.7	2.2	6.7	13	1.0	1.1	.80	.92	.75
23				1.7	2.2	6.0	12	1.0	1.0	1.2	.92	.75
24				1.7	2.4	9.4	9.2	.88	1.0	.86	.92	.75
25				1.7	2.6	11	6.7	1.0	1.9	.86	.92	.75
26				1.7	2.8	13	5.2	.88	1.8	.92	.92	.75
27				1.7	3.1	16	4.4	.88	1.7	.92	.86	.75
28				1.7	3.2	20	4.0	.88	1.6	.86	.86	.75
29				1.7	3.1	42	3.8	.88	1.6	.92	.86	.75
30				1.7	---	61	3.7	.88	1.5	.98	.86	.75
31				1.7	---	55	---	.88	---	.98	.86	---
TOTAL				55.2	59.8	299.6	578.4	52.36	44.3	30.68	30.16	23.72
MEAN				1.78	2.06	9.66	19.3	1.69	1.48	.99	.97	.79
MAX				1.9	3.2	61	53	5.0	2.8	1.4	1.1	.86
MIN				1.7	1.7	2.4	3.7	.88	1.0	.75	.86	.75

04024314 LITTLE BALSAM CREEK AT PATZAU, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: OCTOBER 1975 TO SEPTEMBER 1976.

REMARKS.--SEDIMENT RECORDS ARE FAIR EXCEPT FOR WINTER PERIOD WHICH ARE POOR. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 20 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 2,100 MG/L MAR. 30; MINIMUM DAILY MEAN, 1 MG/L ON MANY DAYS. MAXIMUM OBSERVED, 1,330 MG/L MAR. 30; MINIMUM OBSERVED, 1 MG/L ON MANY DAYS.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 340 TONS (308 TONNES) MAR. 30; MINIMUM DAILY, 0 TON (0 TONNE) ON MANY DAYS.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Jan. 28, 1976	1200	0.0	1.66	175	May 25, 1976	1500	12.5	1.02	220
Feb. 26, 1976	0900	2.0	2.84	75	June 22, 1976	1200	16.0	1.08	200
Mar. 18, 1976	1330	2.0	2.30	160	July 14, 1976	1530	15.0	0.89	140
Mar. 26, 1976	0900	1.5	12.9	80	Aug. 3, 1976	1200	12.5	0.97	220
Mar. 30, 1976	1130	0.0	61.9	<50	Sept. 3, 1976	1300	12.0	0.83	190
Mar. 30, 1976	1600	0.0	61.1	<50	Sept. 21, 1976	1700	9.5	0.76	220
Apr. 21, 1976	1200	9.0	6.14	80					

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUSPENDED SED. FALL DIAM.	SUSPENDED SED. FALL DIAM.	SUSPENDED SED. FALL DIAM.
					% FINER THAN .002 MM	% FINER THAN .004 MM	% FINER THAN .008 MM
MAR, 1976							
30...	1115	61	1330	219	--	--	--
31...	1645	58	1010	158	--	--	--
APR							
01...	0845	41	--	--	--	--	--
01...	1510	53	146	21	19	27	31
02...	1025	45	87	11	9	12	15

DATE	SUSPENDED SED. FALL DIAM.					
	% FINER THAN .016 MM	% FINER THAN .031 MM	% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM
MAR, 1976						
30...	--	--	17	24	44	85
31...	--	--	12	16	32	83
APR						
01...	--	--	7	12	33	89
01...	39	46	52	61	79	93
02...	20	26	32	43	72	90

STREAMS TRIBUTARY TO LAKE SUPERIOR

04024314 LITTLE BALSAM CREEK AT PATZAU, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), JANUARY TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)	
	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)										
	JANUARY				FEBRUARY				MARCH			
1	3	.02	3	.01	6	.05						
2	3	.02	3	.01	6	.05						
3	3	.02	3	.01	5	.04						
4	3	.02	3	.01	5	.04						
5	3	.02	3	.01	5	.04						
6	3	.01	3	.01	4	.03						
7	3	.01	3	.01	4	.03						
8	3	.01	3	.01	4	.03						
9	3	.01	3	.01	4	.03						
10	3	.01	3	.01	4	.03						
11	3	.01	3	.01	4	.03						
12	3	.01	3	.01	4	.03						
13	3	.01	3	.01	5	.04						
14	3	.01	3	.01	4	.03						
15	3	.01	3	.01	4	.03						
16	3	.01	3	.02	4	.03						
17	3	.01	3	.02	4	.03						
18	3	.01	3	.02	1	.01						
19	3	.01	3	.02	5	.04						
20	3	.01	4	.02	8	.10						
21	3	.01	4	.02	11	.13						
22	3	.01	4	.02	12	.14						
23	3	.01	4	.02	11	.13						
24	3	.01	4	.03	15	.18						
25	3	.01	5	.04	58	1.7						
26	3	.01	1	.01	50	1.8						
27	3	.01	6	.05	36	1.6						
28	3	.01	6	.05	31	1.7						
29	3	.01	6	.05	248	27						
30	3	.01	---	---	2100	340						
31	3	.01	---	---	250	37						
MONTH	---	.36	---	.54	---	412.50						

DAY	MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)									
	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)																						
	APRIL				MAY				JUNE				JULY				AUGUST				SEPTEMBER			
1	110	15	5	.06	1	0	2	.01	1	0	1	0	1	0	1	0								
2	120	17	4	.05	16	.04	2	.01	1	0	1	0	1	0	1	0								
3	140	17	6	.07	1	0	2	.01	1	0	1	0	1	0	7	.02								
4	140	14	5	.05	1	0	2	.01	3	.01	4	.01	3	.01	4	.01								
5	45	4.2	5	.04	1	0	2	.01	1	0	1	0	1	0	3	.01								
6	72	8.4	1	.01	1	0	2	.01	4	.01	3	.01	4	.01	3	.01								
7	56	5.4	1	.01	3	.01	2	.01	4	.01	1	0	4	.01	1	0								
8	58	4.8	3	.02	5	.02	1	0	2	.01	1	0	2	.01	1	0								
9	44	3.4	2	.01	1	0	1	0	1	0	1	0	1	0	1	0								
10	100	7.8	2	.01	1	0	1	0	1	0	1	0	1	0	2	0								
11	31	1.7	3	.01	1	0	1	0	14	.04	1	0	1	0	1	0								
12	19	.77	2	.01	1	0	1	0	1	0	1	0	1	0	5	.01								
13	62	2.2	1	0	1	0	1	0	1	0	1	0	1	0	4	.01								
14	29	1.1	4	.01	1	0	10	.02	1	0	1	0	1	0	1	0								
15	26	9.1	18	.05	6	.03	1	0	1	0	1	0	1	0	1	0								
16	14	.38	19	.05	5	.02	1	0	1	0	1	0	1	0	1	0								
17	12	.28	18	.05	10	.04	1	0	1	0	1	0	1	0	1	0								
18	100	3.0	18	.03	20	.15	1	0	1	0	1	0	1	0	1	0								
19	24	.60	16	.04	12	.06	1	0	14	.04	1	0	14	.04	1	0								
20	11	.20	7	.02	12	.05	12	.04	11	.03	1	0	11	.03	1	0								
21	8	.13	2	.01	13	.04	8	.02	10	.02	1	0	10	.02	1	0								
22	100	3.1	1	0	4	.01	5	.01	2	0	1	0	2	0	1	0								
23	20	.65	1	0	4	.01	10	.03	1	0	1	0	1	0	1	0								
24	14	.35	1	0	7	.02	12	.03	6	.01	1	0	6	.01	1	0								
25	12	.22	2	.01	12	.06	7	.02	13	.03	1	0	13	.03	1	0								
26	10	.14	1	0	16	.08	4	.01	18	.02	1	0	18	.02	1	0								
27	7	.08	1	0	1	0	7	.02	10	.02	1	0	10	.02	1	0								
28	7	.08	8	.02	1	0	18	.04	1	0	3	.01	1	0	3	.01								
29	8	.08	16	.04	10	.04	4	.01	1	0	1	0	1	0	1	0								
30	5	.05	1	0	1	0	1	0	1	0	1	0	1	0	1	0								
31	---	---	1	0	---	---	1	0	1	0	1	0	1	0	---	---								
MONTH	---	121.21	---	.68	---	.68	---	.32	---	.25	---	.08	---	.08	---	.08								

STREAMS TRIBUTARY TO LAKE SUPERIOR

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04024315 LITTLE BALSAM CREEK NEAR PATZAU, WI

LOCATION.--LAT 46°30'13", LONG 92°14'05", IN SW 1/4 SEC.34, T.47 N., R.15 W., DOUGLAS COUNTY, HYDROLOGIC UNIT 04010301, ON LEFT BANK AT COUNTY TRUNK HIGHWAY B CULVERT, 0.5 MI (0.8 KM) UPSTREAM FROM MOUTH, AND 1.2 MI (1.9 KM) NORTHWEST OF PATZAU.

DRAINAGE AREA.--5.18 MI² (13.42 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--NOVEMBER 1975 TO SEPTEMBER 1976.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 850 FT (259 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD AND THOSE BELOW 3.0 FT³/S (0.085 M³/S), WHICH ARE FAIR.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE DURING PERIOD NOVEMBER 1975 TO SEPTEMBER 1976, 72 FT³/S (2.04 M³/S) APR. 5, GAGE HEIGHT, 4.89 FT (1.490 M); MINIMUM, 0.75 FT³/S (0.021 M³/S) SEPT. 15, GAGE HEIGHT, 3.60 FT (0.102 M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	7.6	1.7	2.0	4.9	54	3.0	1.5	1.2	.90	.85
2		---	6.4	1.7	2.0	4.8	52	3.0	1.5	1.2	.90	.85
3		---	5.0	1.7	2.1	4.5	46	2.9	1.4	1.2	.90	.85
4		---	3.8	1.6	2.1	4.1	38	2.8	1.3	1.2	1.0	.85
5		---	3.1	1.6	2.1	3.9	46	2.7	1.2	1.2	1.0	.85
6		---	2.8	1.6	2.1	3.7	52	2.3	1.2	1.2	1.0	.80
7		---	2.6	1.6	2.1	3.5	46	2.2	1.2	1.3	1.0	.80
8		---	2.4	1.6	2.1	3.3	34	2.1	1.2	1.2	1.0	.85
9		---	2.2	1.6	2.2	3.1	26	2.0	1.2	1.2	1.0	.85
10		---	2.1	1.7	2.2	3.0	28	1.9	1.5	1.2	1.0	.85
11		---	2.0	1.7	2.2	3.1	16	1.6	1.4	1.2	1.0	.85
12		---	2.0	1.7	2.2	3.2	13	1.8	1.4	1.2	.85	.85
13		---	1.9	1.7	2.3	3.0	10	1.7	1.6	1.2	.90	.95
14		---	1.9	1.7	2.3	2.9	13	1.7	1.5	1.2	.95	.85
15		---	1.8	1.7	2.3	2.6	13	1.7	1.8	1.3	.95	.75
16		---	1.8	1.7	2.3	2.7	9.8	1.6	1.6	1.2	.95	.80
17		5.3	1.8	1.7	2.4	2.7	8.8	1.5	1.6	1.2	.90	.85
18		6.5	1.8	1.7	2.4	2.7	10	1.4	2.2	1.2	.90	.85
19		30	1.8	1.7	2.5	4.0	10	1.3	1.6	1.3	.90	.90
20		22	1.8	1.7	2.5	5.8	8.5	1.2	1.3	1.3	.90	.90
21		16	1.8	1.7	2.5	15	6.5	1.2	1.2	1.2	.85	.85
22		17	1.8	1.7	2.6	13	10	1.2	1.2	1.2	.85	.85
23		14	1.8	1.8	2.7	9.2	11	1.2	1.2	1.1	.85	.85
24		11	1.8	1.6	2.8	14	8.5	1.2	1.2	1.1	.85	.85
25		10	1.8	1.8	2.9	13	6.2	1.1	1.5	1.1	.85	.85
26		9.2	1.8	1.9	3.2	20	4.8	1.1	1.4	1.0	.85	.85
27		8.2	1.7	1.9	4.0	18	4.0	1.1	1.3	1.0	.85	.85
28		7.6	1.7	1.9	4.6	26	3.4	1.1	1.2	1.0	.85	.85
29		7.2	1.7	2.0	4.6	51	3.1	1.1	1.2	1.0	.85	.85
30		7.6	1.7	2.0	---	66	3.0	1.2	1.2	.95	.85	.85
31		---	1.7	2.0	---	56	---	1.4	---	.95	.85	---
TOTAL		---	76.1	53.9	74.3	372.9	596.6	53.5	42.0	36.00	28.25	25.45
MEAN		---	2.45	1.74	2.56	12.0	20.0	1.73	1.40	1.16	.91	.85
MAX		---	7.8	2.0	4.6	66	54	3.0	2.2	1.3	1.0	.95
MIN		---	1.7	1.6	2.0	2.7	3.0	1.1	1.2	.95	.85	.75
CFSM		---	.54	.38	.56	2.63	4.38	.38	.31	.25	.20	.19
IN.		---	.62	.44	.60	3.03	4.87	.44	.34	.29	.23	.21

STREAMS TRIBUTARY TO LAKE SUPERIOR
04024315 LITTLE BALSAM CREEK NEAR PATZAU, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD---SEPTEMBER 1975 TO SEPTEMBER 1976.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: NOVEMBER 1975 TO SEPTEMBER 1976.

REMARKS---SEDIMENT RECORDS ARE FAIR. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 20 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 699 MG/L APR. 6, 1976; MINIMUM DAILY MEAN, 1 MG/L ON MANY DAYS. MAXIMUM OBSERVED, 734 MG/L MAR. 28, 1976; MINIMUM OBSERVED, 1 MG/L ON MANY DAYS.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 109 TONS (99 TONNES) APR. 6; MINIMUM DAILY, 0 TON (0 TONNE) ON MANY DAYS.

WATER QUALITY DATA, SEPTEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
SEP , 1975										
27...	1050	1.8	190	7.7	6.0	1	--	--	8	30
OCT										
21...	1230	1.2	220	7.8	6.0	0	--	--	15	11
NOV										
11...	0930	4.0	160	8.0	3.0	4	--	--	34	58
DEC										
17...	1000	1.8	160	7.6	.0	2	--	--	1	2
JAN , 1976										
22...	1030	1.7	60	7.9	.0	2	--	--	<1	5
FEB										
11...	0915	1.5	60	6.9	.0	3	13.2	95	5	18
MAR										
18...	0800	2.7	180	7.8	.0	2	13.3	96	4	26
APR										
02...	1530	56	55	7.2	2.0	40	11.9	90	10	43
MAY										
13...	1000	1.7	190	6.1	8.0	1	--	--	83	65
JUN										
09...	0900	1.2	225	8.1	13.5	1	--	--	13	92
JUL										
21...	1600	1.2	250	6.0	16.0	1	6.7	96	600	520
AUG										
12...	1015	.85	230	--	15.0	3	9.4	97	74	740
SEP										
15...	1400	.75	240	--	14.0	2	10.1	98	30	100

DATE	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
SEP , 1975										
27...	94	18	24	8.2	3.7	8	.2	1.0	92	0
OCT										
21...	110	16	26	9.4	4.2	8	.2	.9	115	0
NOV										
11...	67	18	17	6.0	2.7	8	.1	.8	60	0
DEC										
17...	70	56	17	6.7	2.8	8	.1	.5	17	0
JAN , 1976										
22...	84	5	22	7.0	3.2	6	.2	.6	96	0
FEB										
11...	84	3	20	8.3	3.3	8	.2	.5	99	0
MAR										
18...	70	2	16	6.2	2.6	6	.1	.4	84	0
APR										
02...	19	0	5.0	1.7	.8	6	.1	.6	26	0
MAY										
13...	87	7	21	8.5	3.0	7	.1	.8	98	0
JUN										
09...	100	4	26	9.6	3.8	7	.2	1.0	122	0
JUL										
21...	100	5	26	8.9	3.7	7	.2	1.0	118	0
AUG										
12...	110	7	26	9.3	4.1	8	.2	.9	124	--
SEP										
15...	110	5	27	9.6	4.1	8	.2	.9	125	--

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

04024315 LITTLE BALSAM CREEK NEAR PATZAU, WI--CONTINUED

WATER QUALITY DATA, SEPTEMBER 1975 TO SEPTEMBER 1976

DATE	ALKALINITY AS CaCO ₃ (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
SEP , 1975										
27...	75	2.9	16	2.9	.5	15	132	119	.18	.64
OCT										
21...	94	2.9	11	3.6	.2	13	118	127	.16	.38
NOV										
11...	49	1.0	15	2.5	.3	13	113	87	.15	1.22
DEC										
17...	14	.7	11	28	.1	14	111	88	.15	.54
JAN , 1976										
22...	79	1.9	10	2.0	.2	15	112	108	.15	.51
FEB										
11...	81	20	10	2.4	.2	15	123	109	.17	.50
MAR										
18...	69	2.1	11	2.1	.1	15	117	97	.16	.85
APR										
02...	21	2.6	6.5	.9	.1	7.3	58	36	.08	8.77
MAY										
13...	80	1.2	7.2	1.9	.1	12	108	103	.15	.50
JUN										
09...	100	1.6	6.8	3.9	.1	13	132	126	.18	.43
JUL										
21...	97	1.9	8.7	3.5	.1	15	129	125	.18	.42
AUG										
12...	102	--	9.2	2.6	.1	16	129	131	.18	.30
SEP										
15...	103	--	16	3.3	.1	16	138	139	.19	.28

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KjEL-Dahl NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO ₃) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PERI-PHYTON BIOMASS ASH WEIGHT 8/50 M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT 6/50 M	UNCORRECTED PERI-PHYTON CHLOROPHYLL B (MG/50 M)	UNCORRECTED PERI-PHYTON CHLOROPHYLL A (MG/50 M)
SEP , 1975										
27...	.07	.07	.14	.62	.01	--	--	--	--	--
OCT										
21...	.00	.12	.12	.53	.01	8.4	18.0	24.0	.10	3.3
NOV										
11...	.13	.53	.66	2.9	.04	--	--	--	--	--
DEC										
17...	.18	.35	.53	2.3	.02	--	--	--	--	--
JAN , 1976										
22...	.22	.25	.47	2.1	.04	6.2	.000	.000	.00	.00
FEB										
11...	.26	.25	.51	2.3	.03	--	--	--	--	--
MAR										
10...	.20	.31	.51	2.3	.03	--	--	--	--	--
APR										
02...	.10	.60	.70	3.1	.11	15	--	--	--	--
MAY										
13...	.10	.18	.28	1.2	.02	--	15.7	32.7	.00	23
JUN										
09...	.12	.13	.25	1.1	.01	--	--	--	--	--
JUL										
21...	.21	.10	.31	1.4	.03	5.0	3.31	7.69	2.4	26
AUG										
12...	.22	.13	.35	1.6	.04	--	--	--	--	--
SEP										
15...	.32	.13	.45	2.0	.03	--	--	--	--	--

STREAMS TRIBUTARY TO LAKE SUPERIOR
04024315 LITTLE BALSAM CREEK NEAR PATZAU, WI--CONTINUED

WATER QUALITY DATA, SEPTEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDE ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDE CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDE CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CD) (UG/L)
OCT , 1975												
21...	1230	1.2	1	0	1	1	1	0	<10	<10	0	0
JAN , 1976												
22...	1030	1.7	1	0	1	1	0	1	<10	0	<10	1
APR												
02...	1530	56	0	0	0	0	0	0	<10	0	<10	0
JUL												
21...	1600	1.2	1	0	1	1	1	0	<10	0	<10	0

DATE	SUS- PENDE COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CD) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDE COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS- PENDE LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)
OCT , 1975											
21...	0	0	38	38	0	90	10	14	14	0	10
JAN , 1976											
22...	0	1	10	0	10	400	270	2	0	2	20
APR											
02...	0	0	10	10	0	2400	190	3	2	1	90
JUL											
21...	0	0	0	0	0	200	30	4	4	0	10

DATE	SUS- PENDE MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS- PENDE MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDE SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDE ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT , 1975											
21...	0	10	<.5	.0	<.5	0	0	0	60	60	4
JAN , 1976											
22...	10	10	<.5	.0	<.5	1	1	0	0	0	0
APR											
02...	70	20	<.5	.0	<.5	0	0	0	20	10	10
JUL											
21...	10	0	<.5	.0	<.5	1	1	0	10	0	10

PESTICIDE ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL PCB (UG/L)	POLY- CHLD- RINATED NAPH- THA- LENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLOR- DANE (UG/L)	TOTAL DDO (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)
APR , 1976									
02...	1530	56	.0	.00	.00	.0	.00	.00	.00
MAY									
13...	1000	1.7	.0	.00	.00	.0	.00	.00	.00

DATE	TOTAL DI- AZINON (UG/L)	TOTAL DI- ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)	TOTAL HEPTA- CHLOR (UG/L)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	DIS- SOLVED LINDANE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALA- THION (UG/L)
APR , 1976									
02...	.00	.00	.00	.00	.00	.00	--	.00	.00
MAY									
13...	.00	.00	.00	.00	.00	.00	.00	.00	--

DATE	TOTAL METHYL PARA- THION (UG/L)	TOTAL METHYL TRI- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL TOX- APHENE (UG/L)	TOTAL TRI- THION (UG/L)	TOTAL 2,4,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
APR , 1976								
02...	.00	.00	.00	0	.00	--	--	--
MAY								
13...	.00	.00	.00	0	.00	.00	.00	.00

04024315 LITTLE BALSAM CREEK NEAR PATZAU, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, SEPTEMBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Sept. 27, 1975	1050	CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	45	35	Grab sample
		<i>Cocconeis</i>	22	18	
		<i>Cymbella</i>	7	6	
		<i>Navicula</i>	45	35	
		<i>Nitzschia</i>	7	6	
		<i>Synedra</i>		0	
TOTAL	120				
Oct. 21, 1975	1230	CHRYSOPHYTA			
		Bacillariophyceae			Grab sample
		<i>Achnanthes</i>	31	18	
		<i>Cocconeis</i>	21	12	
		<i>Cyclotella</i>	21	12	
		<i>Cymbella</i>	10	6	
		<i>Gomphonema</i>		0	
		<i>Navicula</i>	10	6	
		<i>Nitzschia</i>	74	41	
		<i>Synedra</i>	10	6	
TOTAL	180				
Nov. 11, 1975	0930	CHRYSOPHYTA			
		Bacillariophyceae			Grab sample
		<i>Achnanthes</i>	89	14	
		<i>Cocconeis</i>	22	3	
		<i>Cymbella</i>	67	10	
		<i>Eunotia</i>	22	3	
		<i>Meridion</i>	22	3	
		<i>Navicula</i>	110	17	
		<i>Nitzschia</i>	89	14	
		<i>Synedra</i>	220	34	
TOTAL	650				
Dec. 17, 1975	1000	CHRYSOPHYTA			
		Bacillariophyceae			Grab sample
		<i>Achnanthes</i>	22	33	
		<i>Cocconeis</i>	11	17	
		<i>Cyclotella</i>	5	8	
		<i>Cymbella</i>	5	8	
		<i>Nitzschia</i>		0	
		CYANOPHYTA			
		Myxophyceae			
		<i>Anacystis</i>	22	33	
TOTAL	65				
Jan. 22, 1976	1030	CHLOROPHYTA			
		Chlorophyceae			Grab sample
		<i>Kirchneriella</i>	8	20	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	20	50	
		<i>Cocconeis</i>	4	10	
		<i>Nitzschia</i>		0	
		CYANOPHYTA			
		Myxophyceae			
<i>Anacystis</i>	8	20			
TOTAL	40				
Feb. 11, 1976	0915	CHLOROPHYTA			
		Chlorophyceae			Grab sample
		<i>Chlamydomonas</i>	5	14	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	19	57	
<i>Cocconeis</i>	10	29			
<i>Navicula</i>		0			
TOTAL	34				
Mar. 18, 1976	0800	CHRYSOPHYTA			
		Bacillariophyceae			Grab sample
		<i>Achnanthes</i>	22	50	
		<i>Cymbella</i>		0	
		<i>Meridion</i>	13	30	
		<i>Navicula</i>	4	10	
<i>Nitzschia</i>	4	10			
TOTAL	43				

STREAMS TRIBUTARY TO LAKE SUPERIOR
04024315 LITTLE BALSAM CREEK NEAR PATZAU, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, SEPTEMBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Apr. 2, 1976	1530	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	19	4	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	38	7	
		<i>Eunotia</i>		0	
		<i>Fragilaria</i>	94	18	
		<i>Gomphonema</i>	38	7	
		<i>Melosira</i>	19	4	
		<i>Navicula</i>	56	11	
		<i>Nitzschia</i>	56	11	
		<i>Pinnularia</i>	19	4	
		CYANOPHYTA			
Myxophyceae					
<i>Oscillatoria</i>	190	36			
TOTAL	530				
May 13, 1976	1000	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Scenedesmus</i>	230	27	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	290	33	
		<i>Cyclotella</i>	230	27	
		<i>Navicula</i>	58	7	
		<i>Nitzschia</i>	58	7	
		TOTAL	880		
June 9, 1976	0900	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	2,100	79	
		<i>Nitzschia</i>	270	10	
		<i>Pinnularia</i>	67	3	
		<i>Synedra</i>	200	8	
TOTAL	2,600				
July 21, 1976	1600	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	190	52	
		<i>Cocconeis</i>	58	16	
		<i>Cymbella</i>	29	8	
		<i>Gomphonema</i>	14	4	
		<i>Navicula</i>	29	8	
		<i>Nitzschia</i>	43	12	
		TOTAL	360		
		Aug. 12, 1976	1015	CHRYSOPHYTA				Grab sample
Bacillariophyceae					
<i>Achnanthes</i>	200			63	
<i>Amphora</i>	17			5	
<i>Cocconeis</i>	33			11	
<i>Gomphonema</i>	17			5	
<i>Meridion</i>				0	
<i>Navicula</i>	33			11	
<i>Nitzschia</i>	17			5	
TOTAL	320				
Sept. 15, 1976	1400	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Cocconeis</i>	26	21	
		<i>Cymbella</i>	7	5	
		<i>Navicula</i>	39	32	
		<i>Neidium</i>	13	11	
		<i>Nitzschia</i>	33	26	
		CYANOPHYTA			
		Myxophyceae			
		<i>Lyngbya</i>		0	
		<i>Spirulina</i>	7	5	
		TOTAL	120		

04024315 LITTLE BALSAM CREEK NEAR PATZAU, WI--CONTINUED

WATER QUALITY DATA, SEPTEMBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 11, 1975	0930	3.0	4.01	-	Mar. 26, 1976	1000	1.5	18.4	170
Nov. 18, 1975	1100	3.0	5.49	130	Mar. 30, 1976	1030	0.0	65.8	<50
Dec. 17, 1975	1045	0.0	1.83	-	Apr. 21, 1976	1300	8.5	6.35	100
Jan. 22, 1976	1030	0.0	1.74	60	May 25, 1976	1600	15.5	1.06	220
Jan. 28, 1976	1300	0.0	1.96	70	June 22, 1976	1300	17.0	1.10	220
Feb. 26, 1976	1400	2.0	3.18	165	Sept. 3, 1976	1300	12.0	.83	200
Mar. 18, 1976	0900	0.0	2.73	180	Sept. 21, 1976	1600	10.0	.85	220

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT CHARGE (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT , 1975					
21...	1230	8.0	1.2	1	.00
NOV					
11...	0930	3.0	4.0	6	.06

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT CHARGE (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	
MAR , 1976								
30...	1000	64	446	77	23	25	27	
31...	1615	63	412	70	9	11	13	
APR								
01...	1005	48	159	21	24	26	31	
01...	1350	56	264	40	14	18	23	
02...	0915	43	155	18	10	14	17	
DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
MAR , 1976								
30...	30	35	39	48	70	96	100	
31...	16	21	24	33	58	93	100	
APR								
01...	35	42	49	66	84	94	100	
01...	27	33	37	44	66	94	100	
02...	20	26	30	41	70	97	100	

STREAMS TRIBUTARY TO LAKE SUPERIOR

04024315 LITTLE BALSAM CREEK NEAR PATZAU, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), NOVEMBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)											
	CONCENTRATION (MG/L)	LOADS (T/DAY)										
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	18	.38	3	.01	5	.03	26	.34
2			---	---	17	.29	3	.01	5	.03	25	.32
3			---	---	12	.16	3	.01	6	.03	24	.29
4			---	---	9	.09	2	.01	6	.03	22	.24
5			---	---	6	.05	2	.01	6	.03	20	.21
6			---	---	5	.04	2	.01	6	.03	18	.18
7			---	---	5	.04	2	.01	6	.03	17	.16
8			---	---	4	.03	2	.01	6	.03	16	.14
9			---	---	4	.02	2	.01	7	.04	14	.12
10			---	---	6	.03	3	.01	7	.04	13	.11
11			---	---	5	.03	3	.01	6	.04	14	.12
12			---	---	5	.03	3	.01	7	.04	15	.13
13			---	---	5	.03	3	.01	8	.05	13	.11
14			---	---	5	.03	3	.01	8	.05	12	.09
15			---	---	4	.02	3	.01	8	.05	12	.09
16			---	---	3	.01	3	.01	8	.05	10	.07
17			13	.19	2	.01	3	.01	9	.06	10	.07
18			13	.28	4	.02	3	.01	9	.06	10	.07
19			72	7.0	4	.02	3	.01	9	.06	21	.23
20			53	4.0	4	.02	3	.01	9	.06	32	.50
21			42	1.8	4	.02	3	.01	9	.06	208	20
22			44	2.0	4	.02	4	.02	10	.07	20	.80
23			38	1.4	4	.02	4	.02	11	.08	70	2.4
24			30	.89	4	.02	4	.02	11	.08	86	3.1
25			28	.76	4	.02	4	.02	12	.09	17	.60
26			25	.62	4	.02	5	.03	14	.12	235	13
27			22	.49	3	.01	5	.03	20	.22	240	12
28			20	.41	3	.01	4	.02	24	.30	333	27
29			19	.37	3	.01	5	.03	24	.30	439	60
30			20	.41	3	.01	5	.03	---	---	349	61
31			---	---	3	.01	5	.03	---	---	256	39
MONTH			---	---	---	1.52	---	.46	---	2.16	---	242.49
DAY	MEAN CONCENTRATION (MG/L)											
	CONCENTRATION (MG/L)	LOADS (T/DAY)										
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	257	37	10	.08	4	.02	1	0	1	0	2	0
2	256	37	9	.07	4	.02	1	0	1	0	3	.01
3	118	15	7	.05	2	.01	1	0	1	0	4	.01
4	410	46	5	.04	2	.01	1	0	3	.01	1	0
5	375	60	6	.04	4	.01	1	0	5	.01	2	0
6	699	109	4	.02	4	.01	1	0	2	.01	1	0
7	404	52	2	.01	6	.02	2	.01	5	.01	4	.01
8	327	33	3	.02	6	.02	1	0	2	.01	2	0
9	168	14	4	.02	4	.01	1	0	3	.01	3	.01
10	88	6.9	4	.02	6	.02	1	0	4	.01	1	0
11	40	2.1	4	.02	6	.02	1	0	14	.04	1	0
12	23	.83	4	.02	9	.03	1	0	2	0	1	0
13	15	.42	1	0	6	.02	1	0	2	0	1	0
14	51	2.0	6	.03	6	.02	1	0	10	.03	1	0
15	19	.65	4	.02	14	.07	5	.02	1	0	1	0
16	9	.24	4	.02	11	.05	1	0	1	0	1	0
17	7	.17	6	.02	2	.01	1	0	1	0	2	0
18	48	1.5	5	.02	9	.05	1	0	1	0	2	0
19	12	.36	5	.02	1	0	11	.06	1	0	2	0
20	8	.19	8	.03	1	0	21	.10	1	0	2	0
21	7	.14	8	.03	1	0	6	.02	2	0	2	0
22	124	5.1	6	.02	4	.01	4	.01	2	0	2	0
23	50	1.6	6	.02	1	0	3	.01	2	0	2	0
24	16	.35	4	.01	4	.01	3	.01	14	.03	2	0
25	13	.23	4	.01	5	.02	3	.01	2	0	2	0
26	12	.16	4	.01	4	.02	9	.02	2	0	2	0
27	12	.12	4	.01	1	0	2	.01	2	0	2	0
28	14	.14	4	.01	1	0	2	.01	2	0	2	0
29	16	.13	6	.02	1	0	2	.01	2	0	2	0
30	9	.07	4	.01	1	0	2	0	2	0	2	0
31	---	---	6	.02	---	---	2	.01	2	0	---	---
MONTH	---	426.40	---	.74	---	.48	---	.31	---	.17	---	.04

STREAMS TRIBUTARY TO LAKE SUPERIOR

04024318 LITTLE BALSAM CREEK TRIBUTARY NEAR PATZAU, WI

LOCATION.--LAT 46°30'12", LONG 92°14'18", IN NE 1/4 NE 1/4 SEC.4, T.46 N., R.15 W., DOUGLAS COUNTY, HYDROLOGIC UNIT 04010301, ON RIGHT BANK AT BRIDGE ON COUNTY TRUNK HIGHWAY B, 0.30 MI (0.48 KM) UPSTREAM FROM LITTLE BALSAM CREEK, AND 1.3 MI (2.1 KM) NORTHWEST OF PATZAU.

DRAINAGE AREA.--0.54 MI² (1.399 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--JANUARY TO SEPTEMBER 1976.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 870 FT (265 M), FRDM TOPOGRAPHIC MAP.

REMARKS.--RECORDS 6000 EXCEPT THOSE FOR WINTER PERIODS AND THOSE ABOVE 1.8 FT³/S (0.051 M³/S), WHICH ARE FAIR.

EXTREMES FOR CURRENT YEAR.--JANUARY TO SEPTEMBER 1976: MAXIMUM DAILY DISCHARGE DURING PERIOD OF RECORD, 20 FT³/S (0.566 M³/S) MAR. 30; NO FLOW ON MANY DAYS MAY TO SEPTEMBER.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				.08	.07	1.0	2.3	.09	.03	0	0	
2				.08	.06	1.0	2.4	.10	.03	0	0	
3				.07	.06	.96	1.4	.10	.02	0	0	
4				.07	.06	.92	1.2	.08	.01	0	0	
5				.07	.06	.86	1.6	.06	0	0	.01	
6				.07	.06	.82	1.4	.04	0	0	0	
7				.06	.06	.76	1.0	.03	0	0	0	
8				.05	.06	.74	.75	.03	0	0	0	
9				.04	.06	.70	.66	.03	0	0	0	
10				.04	.06	.68	.69	.03	0	0	0	
11				.03	.06	.66	.41	.03	0	0	.01	
12				.03	.06	.64	.25	.03	.01	0	0	
13				.03	.06	.60	.22	.03	.03	0	0	
14				.03	.06	.58	.38	.03	.02	0	0	
15				.03	.06	.56	.40	.04	.09	0	0	
16				.03	.07	.54	.23	.03	.23	0	0	
17				.03	.07	.52	.19	.03	.06	0	0	
18				.04	.08	.52	.53	.02	.50	0	0	
19				.04	.08	.54	.56	.02	.13	.02	0	
20				.04	.09	.56	.24	.02	.04	0	0	
21				.05	.10	.60	.17	.01	.01	0	0	
22				.05	.12	.70	1.2	.02	0	.10	0	
23				.05	.14	1.0	.79	.01	0	0	0	
24				.06	.18	5.0	.49	.01	0	0	0	
25				.06	.70	9.2	.29	.01	.01	0	0	
26				.06	1.2	13	.17	0	0	0	0	
27				.07	1.2	15	.12	0	0	0	0	
28				.07	1.1	18	.10	0	0	0	0	
29				.07	1.1	19	.09	0	0	0	0	
30				.07	---	20	.09	0	0	0	0	
31				.07	---	5.7	---	0	---	0	0	---
TOTAL				1.64	7.14	121.36	20.32	.93	1.22	.12	.02	0
MEAN				.053	.25	3.91	.68	.030	.041	.004	.0006	0
MAX				.08	1.2	20	2.4	.10	.50	.10	.01	0
MIN				.03	.06	.52	.09	0	0	0	0	0
CFSM				.08	.39	6.11	1.06	.05	.06	.006	0	0
IN.				.10	.41	7.04	1.18	.05	.07	.007	.001	0

STREAMS TRIBUTARY TO LAKE SUPERIOR

0402431g LITTLE BALSAM CREEK TRIBUTARY NEAR PATZAU, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--JANUARY TO SEPTEMBER 1976.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: JANUARY TO SEPTEMBER 1976.

REMARKS.--SEDIMENT RECORDS ARE POOR. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 20 PERCENT OF THE YEAR ARE ESTIMATED. ON MANY DAYS THERE WERE MEASUREABLE SUSPENDED-SEDIMENT CONCENTRATIONS FOR MEAN DISCHARGE OF LESS THAN 0.01 CUBIC FEET PER SECOND, SUSPENDED-SEDIMENT DISCHARGE WAS LESS THAN 0.005 TONS (0.005 TONNES) PER DAY.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 239 MG/L AUG. 4; MINIMUM DAILY MEAN, 0 MG/L ON MANY DAYS. MAXIMUM OBSERVED, 327 MG/L AUG. 4; MINIMUM OBSERVED, 0 MG/L ON MANY DAYS.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 1.5 TONS (1.4 TONNES) MAR. 29; MINIMUM DAILY, 0 TON (0 TONNE) ON MANY DAYS.

WATER QUALITY DATA, JANUARY TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Jan. 6, 1976	1400	-	0.11	125	Mar. 30, 1976	0900	0.0	15.0	60
Jan. 29, 1976	0915	0.0	0.07	<50	Mar. 31, 1976	0900	0.0	3.35	<50
Feb. 26, 1976	1200	0.5	1.06	60	Apr. 8, 1976	1030	2.5	0.64	70
Mar. 26, 1976	1300	4.0	5.01	75	Apr. 21, 1976	1300	8.0	0.16	65

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE	SUS. SED. FALL DIAM. % FINER THAN	SUS. SED. FALL DIAM. % FINER THAN	SUS. SED. FALL DIAM. % FINER THAN
				(T/DAY)	.002 MM	.004 MM	.008 MM
MAR , 1976							
30...	1700	18	53	2.6	44	47	51
DATE		SUS. SED. FALL DIAM. % FINER THAN	SUS. SED. FALL DIAM. % FINER THAN	SUS. SED. SIEVE DIAM. % FINER THAN	SUS. SED. SIEVE DIAM. % FINER THAN	SUS. SED. SIEVE DIAM. % FINER THAN	SUS. SED. SIEVE DIAM. % FINER THAN
		.016 MM	.031 MM	.062 MM	.125 MM	.250 MM	.500 MM
MAR , 1976							
30...		54	59	61	68	82	97

STREAMS TRIBUTARY TO LAKE SUPERIOR

04024318 LITTLE BALSAM CREEK TRIBUTARY NEAR PATZAU, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), JANUARY TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)	
	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS
	(MG/L)	(T/DAY)	(MG/L)	(T/DAY)	(MG/L)	(T/DAY)	(MG/L)	(T/DAY)	(MG/L)	(T/DAY)	(MG/L)	(T/DAY)
JANUARY												
1	12	0	8	0	18	.05						
2	10	0	8	0	16	.04						
3	10	0	9	0	15	.04						
4	10	0	9	0	14	.03						
5	10	0	10	0	12	.03						
6	10	0	10	0	11	.02						
7	10	0	10	0	10	.02						
8	10	0	11	0	10	.02						
9	12	0	11	0	9	.02						
10	10	0	12	0	8	.01						
11	10	0	12	0	6	.01						
12	10	0	13	0	6	.01						
13	10	0	14	0	5	.01						
14	9	0	14	0	5	.01						
15	9	0	15	0	4	.01						
16	9	0	16	0	4	.01						
17	8	0	16	0	4	.01						
18	8	0	17	0	3	0						
19	8	0	18	0	4	.01						
20	8	0	18	0	6	.01						
21	8	0	19	.01	7	.01						
22	8	0	20	.01	7	.01						
23	8	0	21	.01	13	.04						
24	6	0	22	.01	15	.20						
25	7	0	23	.04	8	.20						
26	7	0	24	.08	10	.35						
27	7	0	23	.07	18	.87						
28	7	0	21	.06	13	.63						
29	7	0	19	.06	30	1.5						
30	7	0	---	---	19	1.0						
31	8	0	---	---	17	.26						
MONTH	---	0	---	.35	---	5.44						
APRIL												
1	18	.12	14	0	7	0	31	0	98	.08	0	0
2	23	.21	10	0	4	0	31	0	142	.11	0	0
3	8	.03	8	0	5	0	31	0	285	.07	0	0
4	8	.03	6	0	5	0	32	0	239	0	0	0
5	10	.05	5	0	6	0	32	0	41	0	0	0
6	11	.04	3	0	7	0	32	0	41	0	0	0
7	13	.04	3	0	8	0	33	0	41	0	0	0
8	15	.03	7	0	9	0	33	0	42	0	0	0
9	11	.02	7	0	11	0	34	0	43	0	0	0
10	10	.02	5	0	12	0	34	0	44	0	0	0
11	12	.01	19	0	14	0	34	0	36	0	0	0
12	12	.01	17	0	17	0	35	0	34	0	0	0
13	12	.01	13	0	19	0	35	0	0	0	0	0
14	12	.01	11	0	22	0	36	0	0	0	0	0
15	12	.01	10	0	26	.01	36	0	0	0	0	0
16	10	.01	7	0	19	.01	36	0	0	0	0	0
17	15	.01	2	0	6	0	37	0	0	0	0	0
18	24	.04	1	0	31	.05	37	0	0	0	0	0
19	19	.03	4	0	26	.01	36	0	0	0	0	0
20	17	.01	5	0	19	0	32	0	0	0	0	0
21	14	.01	5	0	12	0	14	0	0	0	0	0
22	21	.10	6	0	15	0	8	0	0	0	0	0
23	10	.02	6	0	28	0	4	0	0	0	0	0
24	14	.02	6	0	33	0	5	0	0	0	0	0
25	20	.02	6	0	38	0	7	.01	0	0	0	0
26	31	.01	6	0	29	0	11	.01	0	0	0	0
27	44	.01	7	0	34	0	16	.01	0	0	0	0
28	44	.01	7	0	16	0	23	.02	0	0	0	0
29	23	.01	7	0	28	0	33	.03	0	0	0	0
30	18	0	7	0	30	0	47	.04	8	0	0	0
31	---	---	8	0	---	---	68	.06	0	0	0	0
MONTH	---	.95	---	0	---	.08	---	.19	---	.26	0	0
MAY												
JUNE												
JULY												
AUGUST												
SEPTEMBER												

STREAMS TRIBUTARY TO LAKE SUPERIOR

04024430 NEMADJI RIVER NEAR SOUTH SUPERIOR, WI

LOCATION.--LAT 46°38'00", LONG 92°05'38", IN SW 1/4 SEC.14, T.48 N., R.14 W., DOUGLAS COUNTY, HYDROLOGIC UNIT 04010301, ON RIGHT BANK AT DOWNSTREAM SIDE OF BRIDGE ON COUNTY TRUNK HIGHWAY C, 2.0 MI (3.2 KM) SOUTH OF SOUTH SUPERIOR AND 7.8 MI (12.6 KM) DOWNSTREAM FROM BLACK RIVER.

DRAINAGE AREA.--422 MI² (1,093 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--DECEMBER 1973 TO CURRENT YEAR.

REVISED RECORDS.--WRD WI-75-1: 1974(M).

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 628 FT (191 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 5,880 FT³/S (166 M³/S) MAR. 31, 1976, GAGE HEIGHT, 21.73 FT (6.623 M); MINIMUM, 30 FT³/S (0.85 M³/S) AUG. 29, SEPT. 5, 6, 8-10, 1976, GAGE HEIGHT, 3.49 FT (1.064 M).

PEAK DISCHARGES ABOVE BASE OF 2,000 FT³/S (56.6 M³/S) FOR WATER YEAR 1974 AND 1975:

DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)	DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)
NOV. 21, 1973	UNKNOWN	3,400	96.3	UNKNOWN		APR. 24, 1975	0400	4,850	137	20.40	6.218
APR. 14, 1974	UNKNOWN	3,700	105	ICE JAM		APR. 30, 1975	1600	4,060	115	19.10	5.822
MAY 12, 1974	0700	2,580	73.1	14.81	4.515	JUNE 13, 1975	0600	2,920	82.7	15.84	4.828
JUNE 7, 1974	1300	3,460	98.0	17.37	5.296	JUNE 30, 1975	0800	4,490	127	19.86	6.053
JUNE 11, 1974	0100	5,770	163	21.61	6.587						

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 2,000 FT³/S (56.6 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)	DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)
NOV. 20	1000	2,490	70.6	14.51	4.423	MAR. 31	0100	5,880	166	21.73	6.623

MINIMUM DISCHARGE, 30 FT³/S (0.85 M³/S) AUG. 29, SEPT. 5, 6, 8-10, GAGE HEIGHT, 3.49 FT (1.064 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 10 TO MAR. 30.)

OCT. 1 TO MAR. 31

APR. 1 TO SEPT. 30

4.0	46	11.0	1,420	3.5	31	11.0	1,420
4.5	104	14.0	2,320	4.0	72	14.0	2,320
5.0	170	17.0	3,330	5.0	172	17.0	3,330
7.0	486	21.0	5,270	7.0	486	21.0	5,270
9.0	896	22.0	6,120	9.0	696		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	86	320	110	88	130	5220	261	71	76	41	33
2	67	82	310	110	88	120	5010	250	68	69	40	33
3	67	80	290	100	88	120	4760	235	65	63	39	34
4	63	75	270	100	88	120	4030	214	63	58	43	32
5	60	72	260	100	88	120	3540	194	61	54	52	31
6	56	70	240	100	88	120	3530	160	57	52	49	31
7	55	66	230	100	88	120	3230	162	57	52	44	31
8	51	68	220	98	88	120	2670	150	55	53	42	31
9	52	67	210	98	88	120	2100	144	55	52	40	31
10	52	76	200	98	90	120	1810	135	57	50	44	31
11	52	100	200	98	90	120	1530	126	59	49	65	32
12	54	140	190	96	90	120	1160	118	56	47	56	32
13	54	200	190	96	90	120	932	112	62	46	45	32
14	55	280	180	96	90	120	825	102	69	54	42	32
15	86	400	180	96	92	130	885	96	75	60	42	34
16	54	320	170	96	92	130	779	94	119	59	41	35
17	50	278	170	96	92	130	658	92	127	53	42	34
18	50	300	160	96	94	140	593	90	671	49	42	33
19	51	600	160	96	94	180	774	86	555	48	41	34
20	51	1300	150	96	98	240	667	84	227	77	40	38
21	50	1100	150	96	100	360	541	81	146	129	37	40
22	49	840	140	96	110	560	491	79	112	99	35	39
23	51	620	140	94	100	800	742	76	94	66	34	37
24	83	560	140	94	110	1100	638	75	80	55	33	36
25	144	500	130	92	120	1300	536	72	84	50	34	36
26	143	460	130	92	120	1700	446	69	125	49	36	36
27	121	410	130	90	130	2200	380	66	111	48	33	38
28	110	390	120	90	140	2800	332	68	92	44	33	39
29	102	360	120	90	130	3600	297	68	84	43	31	39
30	94	350	110	90	---	4600	277	69	77	42	31	38
31	88	---	110	90	---	5730	---	71	---	42	32	---
TOTAL	2189	10244	5720	2990	2864	27390	49383	3723	3634	1768	1259	1032
MEAN	70.6	341	185	96.5	98.8	884	1646	120	121	57.7	40.6	34.4
MAX	144	1300	320	110	140	5730	5220	261	671	129	65	40
MIN	49	67	110	90	88	120	277	68	55	42	31	31
CFSM	.17	.81	.44	.23	.23	2.09	3.90	.28	.29	.14	.10	.08
IN.	.19	.90	.50	.26	.25	2.41	4.35	.33	.32	.16	.11	.09
CAL YR 1975	TOTAL	148434	MEAN 407	MAX 4680	MIN 42	CFSM .96	IN 13.08					
WTR YR 1976	TOTAL	112216	MEAN 307	MAX 5730	MIN 31	CFSM .73	IN 9.89					

04024430 NEMADJI RIVER NEAR SOUTH SUPERIOR, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--APRIL 1974 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: APRIL 1974 TO CURRENT YEAR.

REMARKS.--SEDIMENT RECORDS ARE GOOD EXCEPT THOSE FOR WINTER PERIOD WHICH ARE FAIR. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 20 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 1,910 MG/L JUNE 10, 1974; MINIMUM DAILY MEAN, 2 MG/L FEB. 1-9, 1976. MAXIMUM OBSERVED, 2,800 MG/L JUNE 29, 1975; MINIMUM OBSERVED, 2 MG/L OCT. 3, 1974, FEB. 10, 1976.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 21,200 TONS (19,200 TONNES) JUNE 10, 1974; MINIMUM DAILY, 0.48 TON (0.44 TONNE) FEB. 1-9, 1976.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 1,010 MG/L APR. 3; MINIMUM DAILY MEAN, 2 MG/L FEB. 1-9. MAXIMUM OBSERVED, 1,610 MG/L APR. 3; MINIMUM OBSERVED, 2 MG/L FEB. 10, MAR. 17.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 13,100 TONS (11,900 TONNES) APR. 3; MINIMUM DAILY, 0.48 TON (0.44 TONNE) FEB. 1-9.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CF3)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT , 1975										
21...	1100	50	250	7.4	7.5	7	--	--	811	813
NOV										
11...	1130	100	220	8.3	3.5	25	--	--	49	71
DEC										
17...	1600	170	200	7.4	.0	10	--	--	89	814
JAN , 1976										
21...	1600	96	240	7.3	.0	10	--	--	82	833
FEB										
10...	1330	90	270	7.0	.0	7	11.6	83	83	36
MAR										
17...	1530	130	225	7.5	.0	10	12.4	89	87	22
APR										
02...	1100	5090	105	7.9	2.0	220	12.7	96	835	876
MAY										
12...	1630	116	225	7.8	14.0	15	--	--	85	820
JUN										
08...	1300	56	290	8.2	23.5	15	--	--	45	32
JUL										
21...	1330	135	260	7.9	24.5	60	7.5	94	230	520
AUG										
11...	1415	75	250	--	27.0	37	7.5	97	730	3300
SEP										
15...	1030	34	300	--	14.5	9	8.5	95	130	270

DATE	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DISSOLVED PHOSPHATE (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
OCT , 1975										
21...	130	15	33	11	5.5	8	.2	1.3	137	0
NOV										
11...	97	10	25	8.4	4.4	9	.2	1.2	106	0
DEC										
17...	76	7	19	7.0	4.0	10	.2	1.0	84	0
JAN , 1976										
21...	110	13	28	8.5	4.1	8	.2	.9	112	0
FEB										
10...	100	6	25	9.3	4.5	9	.2	.8	115	0
MAR										
17...	86	7	22	7.5	3.8	9	.2	.8	96	0
APR										
02...	39	0	11	2.7	1.2	6	.1	1.1	47	0
MAY										
12...	96	0	22	10	3.5	7	.2	1.1	120	0
JUN										
08...	150	16	39	13	5.6	7	.2	1.5	165	0
JUL										
21...	120	7	33	10	4.9	8	.2	1.4	142	0
AUG										
11...	120	10	32	10	5.7	9	.2	1.4	135	--
SEP										
15...	140	8	36	12	6.3	9	.2	1.4	160	--

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

STREAMS TRIBUTARY TO LAKE SUPERIOR

04024430 NEMAOJI RIVER NEAR SOUTH SUPERIOR, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	ALKA-LINITY AS CAC03 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
OCT , 1975										
21...	112	8.7	14	4.4	.2	13	153	150	.21	20.7
NOV										
11...	87	.9	12	4.3	.2	11	134	119	.18	36.2
DEC										
17...	69	5.4	13	3.8	.3	13	130	103	.18	59.7
JAN , 1976										
21...	92	9.0	14	2.6	.2	15	139	129	.19	36.0
FEB										
10...	94	18	14	4.0	.1	15	141	129	.19	34.3
MAR										
17...	79	4.9	16	3.8	.1	15	136	116	.19	47.7
APR										
02...	39	.9	7.3	1.6	.1	7.3	77	56	.10	1060
MAY										
12...	98	3.0	12	2.6	.1	7.6	142	118	.19	44.5
JUN										
08...	135	1.7	11	3.5	.1	9.5	180	165	.24	27.2
JUL										
21...	116	2.9	14	4.5	.1	10	161	148	.22	58.7
AUG										
11...	111	--	14	3.6	.1	8.2	146	142	.20	29.6
SEP										
15...	131	--	21	4.8	.1	11	179	171	.24	16.4

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORBANIC CARBON (C) (MG/L)	PERI-PHYTON BIOMASS ASH WEIGHT 8/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT 6/SQ M	UNCORRECTED PERI-PHYTON CHLOROPHYLL B 8/SQ M	UNCORRECTED PERI-PHYTON CHLOROPHYLL A 8/SQ M
OCT , 1975										
21...	.00	.26	.26	1.2	.01	7.6	28.0	31.0	.00	1.3
NOV										
11...	.04	.41	.45	2.0	.08	--	--	--	--	--
DEC										
17...	.18	.39	.57	2.5	.04	--	--	--	--	--
JAN , 1976										
21...	.24	.42	.66	2.9	.04	8.6	.100	.200	.00	.20
FEB										
10...	.25	.39	.64	2.8	.04	--	--	--	--	--
MAR										
17...	.27	.43	.70	3.1	.04	--	--	--	--	--
APR										
02...	.27	.88	1.2	5.1	.32	19	--	--	--	--
MAY										
12...	.03	.45	.48	2.1	.05	--	1.23	3.46	.00	.53
JUN										
08...	.02	.25	.27	1.2	.03	--	--	--	--	--
JUL										
21...	.05	.18	.23	1.0	.08	9.7	48.0	59.2	.28	6.6
AUG										
11...	.07	.30	.37	1.6	.07	--	--	--	--	--
SEP										
15...	.01	.15	.16	.71	.03	--	--	--	--	--

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BOTTOM MATERIAL SIZE (MM)	TOTAL NITROGEN IN BOTTOM MATERIAL (N) (MG/KB)	TOTAL PHOSPHORUS IN BOTTOM MATERIAL (P) (MG/KG)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/8)	TOTAL IRON IN BOTTOM MATERIAL (UG/8)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/8)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (8/KG)	IN-CARBON IN BOTTOM MATERIAL (G/KG)
SEP , 1976										
03...	1200	33	<.062	640	300	5	16000	<.5	9.2	.0
			.062-.125	83	150	3	2600	<.5	1.4	.5
			.125-.250	52	68	2	1500	<.5	.9	.1
			.250-1.00	36	53	2	1800	<.5	1.8	.0

STREAMS TRIBUTARY TO LAKE SUPERIOR

04024430 NEMADJI RIVER NEAR SOUTH SUPERIOR, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDE D ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDE D CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDE D CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT , 1975												
21...	1100	50	1	0	1	1	1	0	<10	<10	0	0
JAN , 1976												
21...	1600	96	2	1	1	1	0	1	<10	0	<10	1
APR												
02...	1100	5090	0	0	0	0	0	0	30	20	10	4
JUL												
21...	1330	135	2	1	1	1	1	0	<10	0	<10	3

DATE	SUS- PENDE D COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDE D COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS- PENDE D LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)
OCT , 1975											
21...	0	0	11	11	0	570	140	10	10	0	50
JAN , 1976											
21...	0	1	10	0	10	1100	570	7	0	7	40
APR											
02...	4	0	20	20	0	10000	220	3	1	2	270
JUL											
21...	3	0	10	0	10	2300	0	12	10	2	130

DATE	SUS- PENDE D MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS- PENDE D MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDE D SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDE D ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT , 1975											
21...	10	40	<.5	.0	<.5	0	0	0	50	50	2
JAN , 1976											
21...	0	40	<.5	.0	<.5	2	2	0	0	0	0
APR											
02...	230	40	<.5	.0	<.5	0	0	0	40	30	10
JUL											
21...	120	10	<.5	.0	<.5	0	0	0	20	10	10

PESTICIDE ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL PCB (UG/L)	POLY- CHLO- RINATED NAPH- THA- LENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLOR- DANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)
APR , 1976									
02...	1100	5090	.0	.00	.00	.0	.00	.00	.00
MAY									
12...	1630	116	.0	.00	.00	.0	.00	.00	.00

DATE	TOTAL OI- AZINON (UG/L)	TOTAL DI- ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)	TOTAL HEPTA- CHLOR (UG/L)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	DIS- SOLVED LINDANE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALA- THION (UG/L)
APR , 1976									
02...	.00	.00	.00	.00	.00	.00	--	.00	.00
MAY									
12...	.00	.00	.00	.00	.00	.00	.00	.00	--

DATE	TOTAL METHYL PARA- THION (UG/L)	TOTAL METHYL TRI- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL TOX- APHENE (UG/L)	TOTAL TRI- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
APR , 1976								
02...	.00	.00	.00	0	.00	--	--	--
MAY								
12...	.00	.00	.00	0	.00	.00	.00	.00

STREAMS TRIBUTARY TO LAKE SUPERIOR
04024430 NEMADJI RIVER NEAR SOUTH SUPERIOR, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method		
Sept. 27, 1975	0930	CHLOROPHYTA			Grab sample		
		Chlorophyceae					
		<i>Ankistrodesmus</i>	18	6			
		<i>Dictyosphaerium</i>		0			
		<i>Staurastrum</i>		0			
		CHRYSOPHYTA					
		Bacillariophyceae					
		<i>Amphora</i>	18	6			
		<i>Caloneis</i>	18	6			
		<i>Cyclotella</i>	18	6			
		<i>Cymbella</i>	130	44			
		<i>Gomphonema</i>	18	6			
		<i>Gyrosigma</i>		0			
		<i>Navicula</i>		0			
<i>Nitzschia</i>	56	19					
PYRRHOPHYTA							
Dinophyceae							
<i>Glenodinium</i>	18	6					
TOTAL		300					
Oct. 21, 1975	1100	CHRYSOPHYTA			Grab sample		
		Bacillariophyceae					
		<i>Achnanthes</i>	170	64			
		<i>Cocconeis</i>		0			
		<i>Cymbella</i>	25	9			
		<i>Diatoma</i>		0			
		<i>Gomphonema</i>		0			
		<i>Navicula</i>	25	9			
		<i>Nitzschia</i>	50	18			
		<i>Synedra</i>		0			
		TOTAL		270			
Nov. 11, 1975	1130	CHRYSOPHYTA			Grab sample		
		Bacillariophyceae					
		<i>Achnanthes</i>	320	3			
		<i>Cocconeis</i>	100	1			
		<i>Cymbella</i>	210	2			
		<i>Diatoma</i>	100	1			
		<i>Gomphonema</i>	100	1			
		<i>Gyrosigma</i>	100	1			
		<i>Nelosira</i>	650	7			
		<i>Navicula</i>	650	7			
		<i>Nitzschia</i>	1,200	12			
		<i>Pinnularia</i>	100	1			
		<i>Synedra</i>		0			
		CYANOPHYTA					
		Myxophyceae					
<i>Gomphosphaeria</i>	6,100	63					
TOTAL		9,700					
Dec. 17, 1975	1600	CHRYSOPHYTA			Grab sample		
		Bacillariophyceae					
		<i>Achnanthes</i>	18	19			
		<i>Amphiprora</i>	6	6			
		<i>Asterionella</i>		0			
		<i>Caloneis</i>	6	6			
		<i>Cymbella</i>	6	6			
		<i>Gomphonema</i>	6	6			
		<i>Navicula</i>	31	31			
		<i>Nitzschia</i>	24	25			
		<i>Pinnularia</i>		0			
		TOTAL		98			
		Jan. 21, 1976	1600	CHRYSOPHYTA				Grab sample
Bacillariophyceae							
<i>Achnanthes</i>	4			9			
<i>Amphora</i>				0			
<i>Cymbella</i>	4			9			
<i>Diatoma</i>				0			
<i>Nelosira</i>				0			
<i>Navicula</i>	22			45			
<i>Nitzschia</i>	18			36			
TOTAL				49			

04024430 JEMADJI RIVER NEAR SOUTH SUPERIOR, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Feb. 10, 1976	1330	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	5	6	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	24	31	
		<i>Cymbella</i>	9	12	
		<i>Gomphonema</i>	9	12	
		<i>Navicula</i>	14	19	
		<i>Nitzschia</i>	14	19	
TOTAL	76				
Mar. 17, 1976	1530	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	4	8	
		<i>Cocconeis</i>	2	4	
		<i>Cyclotella</i>	2	4	
		<i>Cymbella</i>	4	8	
		<i>Diatoma</i>		0	
		<i>Fragilaria</i>	6	12	
		<i>Gomphonema</i>	9	16	
		<i>Melosira</i>	4	8	
		<i>Navicula</i>	13	24	
		<i>Nitzschia</i>	6	12	
		<i>Surirella</i>	2	4	
TOTAL	54				
Apr. 2, 1976	1100	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Closterium</i>	74	14	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Cymbella</i>	74	14	
		<i>Gomphonema</i>	74	14	
		<i>Navicula</i>	74	14	
		<i>Synedra</i>	74	14	
		<i>Tabellaria</i>	150	29	
TOTAL	520				
May 12, 1976	1630	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	110	6	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	74	4	
		<i>Cyclotella</i>	37	2	
		<i>Gomphonema</i>	37	2	
		<i>Melosira</i>	180	11	
		<i>Navicula</i>	37	2	
<i>Nitzschia</i>	1,100	66			
<i>Synedra</i>	110	6			
TOTAL	1,700				
June 8, 1976	1330	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	550	19	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Cyclotella</i>	150	5	
		<i>Cymbella</i>	100	3	
		<i>Navicula</i>	250	9	
		<i>Neidium</i>	50	2	
		<i>Nitzschia</i>	400	14	
<i>Synedra</i>	100	3			
CYANOPHYTA					
Myxophyceae					
<i>Anacystis</i>	1,200	41			
EUGLENOPHYTA					
Cryptophyceae					
<i>Chroomonas</i>	100	3			
TOTAL					
July 21, 1976	1330	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	130	7	
		<i>Dictyosphaerium</i>	390	21	
		<i>Scenedesmus</i>	200	10	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	33	2	
		<i>Caloneis</i>	98	5	
		<i>Cymbella</i>	98	5	
		<i>Diatoma</i>		0	
		<i>Gomphonema</i>	98	5	
		<i>Navicula</i>	200	10	
		<i>Nitzschia</i>	390	21	
		<i>Pinnularia</i>	33	2	
		<i>Surirella</i>	33	2	
		<i>Synedra</i>	130	7	
EUGLENOPHYTA					
Euglenophyceae					
<i>Euglena</i>	33	2			
<i>Trachelomonas</i>	33	2			
TOTAL	1,900				

STREAMS TRIBUTARY TO LAKE SUPERIOR
04024430 NEMADJI RIVER NEAR SOUTH SUPERIOR, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Aug. 11, 1976	1415	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	100	8	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Caloneis</i>	50	4	
		<i>Cyclotella</i>	50	4	
		<i>Cymbella</i>	200	17	
		<i>Navicula</i>	150	12	
		<i>Neidium</i>	50	4	
		<i>Nitzschia</i>	550	46	
<i>Synedra</i>	50	4			
TOTAL		1,200			
Sept. 15, 1976	1030	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	130	21	
		<i>Euastrum</i>		0	
		<i>Scenedesmus</i>	67	10	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Amphora</i>	13	2	
		<i>Caloneis</i>	13	2	
		<i>Cocconeis</i>	27	4	
		<i>Cyclotella</i>	27	4	
		<i>Cymbella</i>	13	2	
		<i>Navicula</i>	110	17	
		<i>Nitzschia</i>	190	29	
		<i>Pinnularia</i>	40	6	
		<i>Surirella</i>		0	
		<i>Synedra</i>	13	2	
TOTAL		650			

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Nov. 14, 1975	1130	1.0	200	195	May 12, 1976	-	14.0	102	225
Jan. 21, 1976	1600	0.0	96.6	240	June 8, 1976	1400	23.5	54.6	290
Feb. 10, 1976	1500	0.0	88.0	270	June 30, 1976	0900	18.5	77.8	240
Mar. 17, 1976	1700	0.0	129	225	July 21, 1976	1530	24.5	135	260
Mar. 30, 1976	1500	0.0	4,800	60	Aug. 4, 1976	0900	20.0	38.8	180
Mar. 31, 1976	1500	0.0	5,590	70	Aug. 11, 1976	-	27.0	80.1	250
Apr. 2, 1976	1100	2.0	5,130	105	Sept. 15, 1976	1300	14.5	35.8	300
Apr. 29, 1976	1430	11.0	304	150					

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM
MAR, 1976								
30...	1430	4810	222	2880	61	67	71	71
31...	1440	5660	321	4910	40	49	56	56
MAR, 1976								
30...	77	79	81	83	87	98	100	100
31...	61	65	67	70	75	94	100	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM
31...	1045	5690	0	0	1	39	88	97	99	100
JUN										
30...	1200	78	0	1	16	74	85	91	96	100

STREAMS TRIBUTARY TO LAKE SUPERIOR

04024430 NEMADJI RIVER NEAR SOUTH SUPERIOR, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)										
1	11	2.1	9	2.1	80	69	6	1.8	2	.48	10	3.5
2	10	1.8	8	1.9	74	62	6	1.8	2	.48	8	2.6
3	9	1.7	8	1.7	66	52	4	1.1	2	.48	8	2.6
4	10	1.7	7	1.5	56	41	4	1.1	2	.48	8	2.6
5	10	1.6	7	1.4	52	37	4	1.1	2	.48	8	2.6
6	9	1.4	7	1.3	45	29	4	1.1	2	.48	8	2.6
7	8	1.2	7	1.3	40	25	4	1.1	2	.48	8	2.6
8	9	1.2	7	1.3	35	21	4	1.1	2	.48	8	2.6
9	9	1.2	7	1.3	32	18	4	1.1	2	.48	8	2.6
10	9	1.3	10	2.0	29	16	4	1.1	3	.73	8	2.6
11	9	1.2	33	8.9	29	16	4	1.1	3	.73	8	2.6
12	9	1.3	13	4.9	26	13	3	.78	3	.73	8	2.6
13	9	1.2	30	16	26	13	3	.78	3	.73	8	2.6
14	14	2.3	61	46	23	11	3	.78	3	.73	8	2.6
15	41	12	120	130	23	11	3	.78	3	.74	10	3.5
16	10	1.4	76	66	28	9.2	3	.78	3	.74	10	3.5
17	7	.99	55	40	20	9.2	3	.78	3	.74	10	3.5
18	6	.87	71	58	17	7.3	3	.78	3	.76	12	4.5
19	6	.81	200	324	17	7.3	3	.78	3	.76	23	11
20	5	.70	400	1400	15	6.1	3	.78	4	1.1	48	31
21	6	.85	350	1040	15	6.1	3	.78	4	1.1	90	87
22	5	.69	290	658	12	4.5	3	.78	6	1.8	85	128
23	4	.56	220	368	12	4.5	3	.76	4	1.1	100	216
24	30	7.9	190	287	12	4.5	3	.76	6	1.8	140	416
25	93	37	170	230	10	3.6	3	.74	8	2.6	150	526
26	87	34	150	186	10	3.6	3	.74	8	2.6	250	1150
27	49	16	130	144	10	3.6	3	.73	10	3.5	310	1840
28	35	10	120	126	8	2.6	3	.73	12	4.5	300	2270
29	27	7.5	100	97	8	2.6	3	.73	10	3.5	323	3140
30	20	4.9	100	94	6	1.8	3	.73	---	---	310	3850
31	12	2.8	---	---	6	1.8	3	.73	---	---	296	4430
MONTH	---	160.17	---	5339.60	---	512.30	---	28.73	---	35.31	---	18147.30

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)										
1	385	5320	40	28	16	3.0	44	8.9	17	1.9	15	1.3
2	432	5830	36	25	16	2.9	37	6.9	15	1.6	15	1.3
3	1010	13100	32	20	16	2.8	35	5.8	13	1.4	14	1.3
4	641	7150	31	18	15	2.5	33	5.2	18	2.0	15	1.3
5	426	4070	33	17	14	2.3	32	4.7	21	3.0	15	1.2
6	359	3410	29	14	13	2.0	31	4.4	18	2.3	15	1.2
7	274	2430	27	12	13	2.0	30	4.3	16	1.9	15	1.3
8	212	1530	27	11	13	2.1	29	4.2	16	1.8	14	1.1
9	209	1190	27	10	15	2.2	31	4.4	16	1.8	13	1.1
10	201	983	26	9.5	16	2.5	29	3.9	16	1.9	12	1.0
11	189	784	26	8.8	18	2.8	26	3.5	45	8.9	16	1.4
12	159	498	24	7.7	17	2.6	24	3.1	53	8.1	22	1.9
13	140	352	23	7.0	20	3.4	23	2.8	28	3.5	24	2.1
14	127	282	25	6.8	27	5.1	27	3.9	21	2.4	14	1.2
15	186	447	24	6.2	35	7.1	24	3.9	17	1.9	21	1.9
16	124	264	22	5.5	91	30	23	3.6	15	1.7	28	2.6
17	106	189	20	5.0	96	33	23	3.3	15	1.7	32	2.9
18	100	162	18	4.5	880	2700	22	2.9	15	1.7	27	2.4
19	163	345	17	3.9	791	1380	22	2.8	14	1.6	22	2.0
20	142	259	16	3.5	205	133	47	10	16	1.7	18	1.8
21	88	130	15	3.2	92	37	98	34	18	1.8	16	1.7
22	88	118	15	3.2	68	21	88	24	12	1.1	15	1.6
23	147	298	15	3.1	55	14	53	9.7	13	1.2	14	1.4
24	110	193	15	3.0	45	9.7	39	5.7	14	1.2	14	1.4
25	68	100	15	2.9	47	11	36	4.8	12	1.1	14	1.4
26	53	65	16	3.0	80	27	31	4.1	16	1.6	14	1.4
27	51	53	16	2.9	63	19	29	3.8	20	1.8	15	1.5
28	49	44	16	2.9	52	13	29	3.4	18	1.6	21	2.2
29	43	35	16	2.9	46	10	25	2.9	15	1.3	19	2.0
30	43	32	16	3.0	44	9.1	22	2.5	13	1.1	14	1.4
31	---	---	16	3.1	---	---	20	2.2	15	1.3	---	---
MONTH	---	49663.00	---	256.60	---	4492.10	---	189.60	---	67.90	---	48.30

TOTAL LOAD FOR YEAR: 78940.91 TONS.

STREAMS TRIBUTARY TO LAKE SUPERIOR
04025500 BOIS BRULE RIVER AT BRULE, WI

LOCATION.--LAT 46°32'16", LONG 91°35'43", IN NW 1/4 SW 1/4 SEC.23, T.47 N., R.10 W., DOUGLAS COUNTY, HYDROLOGIC UNIT 04010301, ON RIGHT BANK, 1.4 MI (2.3 KM) SOUTHWEST OF BRULE POST OFFICE, 1.4 MI (2.3 KM) DOWNSTREAM FROM NEBAGAMON CREEK, AND 1.7 MI (2.7 KM) UPSTREAM FROM LITTLE BOIS BRULE RIVER.

DRAINAGE AREA.--120 MI² (311 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--OCTOBER 1942 TO CURRENT YEAR. PRIOR TO JANUARY 1943 MONTHLY DISCHARGE ONLY, PUBLISHED IN WSP 1307.

REVISED RECORDS.--WRD WIS. 1971: DRAINAGE AREA. WSP 1337: 1943(M), 1944, 1945-50(M).

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 948.49 FT (289.100 M) ABOVE MEAN SEA LEVEL. PRIOR TO OCTOBER 1964, NONRECORDING GAGE AT SAME SITE AND DATUM, SUPPLEMENTED BY WATER-STAGE RECORDER PART OF 1959-62.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

AVERAGE DISCHARGE.--34 YEARS, 171 FT³/S (4.843 M³/S), 19.36 IN/YR (491 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 1,520 FT³/S (43.0 M³/S) JUNE 5, 1944, GAGE HEIGHT, 5.2 FT (1.58 M), FROM GRAPH BASED ON GAGE READINGS AND FROM RATING CURVE EXTENDED ABOVE 750 FT³/S (21.2 M³/S); MINIMUM OBSERVED, 67 FT³/S (1.90 M³/S) MAR. 13, 1943.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE, 300 FT³/S (8.50 M³/S) AND MAXIMUM (#):

DATE	TIME	DISCHARGE		GAGE HEIGHT	
		(FT ³ /S)	(M ³ /S)	(FT)	(M)
NOV. 27	1400	357	10.1	2.65	0.608
APR. 6	2200	*714	20.2	3.78	1.152

MAXIMUM GAGE HEIGHT, 4.17 FT (1.271 M) JAN. 16, BACKWATER FROM ICE. MINIMUM DISCHARGE, 114 FT³/S (3.23 M³/S) JULY 31 TO AUG. 4, GAGE HEIGHT, 1.42 FT (0.433 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 30 TO FEB. 13, FEB. 23 TO MAR. 7.)

1.4	111	3.0	443
2.0	214	4.0	612

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	130	190	140	130	150	428	197	135	127	115	119
2	125	129	190	140	120	150	503	197	133	123	115	118
3	125	129	190	140	120	150	569	192	130	122	116	119
4	126	128	190	140	120	150	550	184	129	121	130	120
5	127	128	190	140	120	150	574	179	128	121	141	120
6	127	128	190	140	130	150	624	175	127	122	128	120
7	126	129	180	140	130	150	650	170	126	124	123	119
8	126	129	180	140	130	177	624	169	126	123	120	119
9	128	130	180	140	130	158	587	164	133	122	120	120
10	127	179	170	130	140	158	575	161	136	122	124	120
11	126	177	170	130	140	155	527	157	131	123	133	119
12	127	201	170	130	140	158	465	155	128	121	134	119
13	126	187	160	130	150	176	426	154	129	121	127	120
14	129	177	160	130	147	159	418	154	126	127	123	123
15	129	171	150	140	156	158	404	151	126	125	121	122
16	127	166	150	140	156	155	380	148	126	122	121	121
17	126	165	150	140	155	166	358	147	127	121	120	121
18	126	166	150	140	154	155	351	146	127	119	120	121
19	126	201	150	140	153	160	332	144	151	123	119	124
20	126	251	150	140	152	160	302	143	137	142	118	127
21	127	248	150	140	150	183	282	140	128	134	117	125
22	125	233	150	140	149	182	265	140	125	126	116	123
23	135	232	150	130	150	183	254	138	124	122	116	123
24	158	224	150	130	150	203	241	138	123	120	116	122
25	155	251	150	130	150	207	231	135	140	119	116	122
26	142	256	150	130	150	223	222	132	137	119	117	123
27	135	303	150	130	150	236	213	135	131	119	118	124
28	133	280	140	130	150	251	207	134	127	118	117	124
29	130	196	140	130	150	325	201	134	135	117	116	123
30	130	190	140	130	---	409	197	139	132	117	116	123
31	130	---	140	130	---	410	---	138	---	116	118	---
TOTAL	4032	5614	5020	4200	4122	5977	11960	4790	3945	3800	3751	3643
MEAN	130	187	162	135	142	193	399	155	132	123	121	121
MAX	158	303	190	140	156	410	650	197	157	142	141	127
MIN	125	126	140	130	120	150	197	132	123	116	115	116
CFSM	1.08	1.56	1.35	1.13	1.18	1.61	3.33	1.29	1.10	1.03	1.01	1.01
IN.	1.25	1.74	1.56	1.30	1.28	1.85	3.71	1.48	1.22	1.18	1.16	1.13
CAL YR 1975 TOTAL	61241		MEAN 168	MAX 506	MIN 118	CFSM 1.40	IN 18.98					
WTR YR 1976 TOTAL	60854		MEAN 166	MAX 650	MIN 115	CFSM 1.38	IN 18.86					

04025500 BOIS BRULE RIVER AT BRULE, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1954 TO CURRENT YEAR.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Nov. 13, 1975	1500	3.5	175	115	Apr. 30, 1976	0900	9.0	194	100
Jan. 6, 1976	1400	0.5	140	-	May 26, 1976	1030	13.0	134	130
Jan. 15, 1976	1400	0.0	139	90	June 29, 1976	1600	17.0	136	120
Feb. 4, 1976	1600	0.0	120	90	Aug. 11, 1976	1300	19.0	134	125
Mar. 17, 1976	1300	0.0	154	130	Sept. 22, 1976	1030	9.5	117	135
Mar. 31, 1976	1700	3.0	421	80					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT, 1975						APR, 1976					
06...	0947	--	127	1	.34	05...	0820	3.5	532	17	24
14...	0852	--	129	2	.70	12...	0800	4.0	473	10	13
27...	0818	--	135	1	.36	20...	0822	9.0	303	11	9.0
NOV						MAY					
03...	0812	--	129	2	.70	03...	0820	6.5	194	4	2.1
13...	1410	3.5	175	4	1.9	10...	0935	13.5	161	10	4.3
16...	1025	--	166	2	.90	19...	1050	14.0	145	3	1.2
25...	0840	--	268	2	1.4	24...	0935	13.0	140	4	1.5
DEC						JUN					
02...	0830	--	190	2	1.0	01...	0930	14.0	136	4	1.5
23...	0900	--	150	6	2.4	08...	1055	19.0	125	6	2.0
29...	1111	--	140	9	3.4	14...	0950	19.0	126	4	1.4
JAN, 1976						JUL					
05...	0841	--	140	2	.76	12...	0805	16.0	121	2	.65
12...	1005	--	130	2	.70	20...	0815	19.5	142	4	1.5
15...	1340	.0	140	9	3.4	AUG					
19...	0815	.0	140	8	3.0	11...	1200	19.0	134	5	1.8
27...	0825	.0	130	22	7.7	17...	0825	14.5	119	1	.32
FEB						SEP					
03...	0800	.0	120	8	2.6	07...	0750	19.5	119	1	.32
04...	1530	.0	120	42	14	15...	0810	12.0	122	2	.66
10...	0840	.0	140	8	3.0	21...	1520	10.5	124	10	3.3
17...	0805	1.5	155	4	1.7	22...	1030	9.5	117	6	1.9
23...	0900	.0	150	5	2.0	29...	1000	8.5	122	1	.33
MAR						OCT, 1976					
01...	0945	1.0	150	4	1.6	29...	1200	13.5	135	0	1
08...	0815	.5	198	3	1.6						
16...	1000	4.0	154	3	1.2						
17...	1300	.0	154	4	1.7						
22...	0815	.5	161	4	1.7						
29...	0840	4.5	306	24	20						
31...	1640	3.0	413	28	31						

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BED MAT.								
			SIEVE DIAM.								
			% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM	% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM	% FINER THAN 16.0 MM
JUN, 1976											
29...	1200	135	0	1	4	12	14	15	18	22	43

STREAMS TRIBUTARY TO LAKE SUPERIOR

04026100 LONG LAKE NEAR IRON RIVER, WI

LOCATION.--LAT 46°34'54", LONG 91°20'18", IN SW 1/4 SEC.2, T.47 N., R.8 W., BAYFIELD COUNTY, HYDROLOGIC UNIT 04010301, AT RESIDENCE OF ROBERT WICK, EAST SIDE OF LAKE, 3.6 MI (5.8 KM) NORTHEAST OF IRON RIVER.

DRAINAGE AREA.--1.29 MI² (3.32 KM²). AREA OF LONG LAKE, 184 ACRES (745,000 M²).

PERIOD OF RECORD.--OCTOBER 1964 TO CURRENT YEAR (FRAGMENTARY).

GAGE.--NONRECORDING GAGE. ALTITUDE OF GAGE IS 1,096 FT (334 M), FROM TOPOGRAPHIC MAP.

REMARKS.--LAKE HAS NO SURFACE OUTLET. LAKE ICE COVERED FROM NOV. 22 TO APR. 14.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM GAGE HEIGHT OBSERVED, 4.60 FT (1.402 M) JUNE 15, 1974; MINIMUM OBSERVED, 1.39 FT (0.424 M) AUG. 28, 1968.

EXTREMES FOR CURRENT YEAR.--MAXIMUM GAGE HEIGHT OBSERVED, 4.35 FT (1.326 M) JAN. 6; MINIMUM OBSERVED, 2.82 FT (0.860 M) SEPT. 30.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	3.46	---	---	---	---	---	4.08	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	3.64	---	---
4	3.42	---	---	---	3.67	---	---	---	---	---	---	3.04
5	---	---	---	---	---	---	---	---	3.68	---	---	---
6	---	---	---	4.35	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	3.28	---
8	---	3.46	---	---	---	---	---	4.00	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	4.20	---	---	3.54	---	---
11	3.40	---	---	---	---	---	---	---	---	---	3.39	2.96
12	---	---	---	---	---	---	---	---	3.64	---	---	---
13	---	3.70	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	3.36	---
15	---	3.70	---	---	---	---	---	---	---	---	---	2.92
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	3.99	---	---	---	3.46	---	---
18	3.40	---	---	---	---	---	4.20	---	---	---	---	---
19	---	---	---	---	---	---	---	---	3.70	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	3.26	---
22	---	3.70	---	---	---	---	---	3.90	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	4.14	---	---	3.46	---	---
25	3.48	---	---	---	---	---	---	---	---	---	---	2.84
26	---	---	---	---	---	---	---	3.77	3.68	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	3.16	---
29	---	---	---	---	---	---	---	3.76	3.69	---	---	---
30	---	---	---	---	---	---	4.08	---	---	---	---	2.82
31	---	---	---	---	---	---	---	---	---	3.36	---	---

04026347 PINE CREEK AT MOQUAH, WI

LOCATION.--LAT 46°33'28", LONG 91°06'18", IN NW 1/4 NE 1/4 SEC.15, T.47 N., R.6 W., BAYFIELD COUNTY, HYDROLOGIC UNIT 04010301, ON RIGHT BANK AT BRIDGE ON TOWN ROAD, 1.4 MI (2.3 KM) SOUTHWEST OF MOQUAH, AND 1.5 MI (2.4 KM) UPSTREAM FROM LITTLE PINE CREEK.

DRAINAGE AREA.--5.90 MI² (15.3 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--OCTOBER 1975 TO SEPTEMBER 1976.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 810 FT (247 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--A FLOOD IN JUNE 1946 EXCEEDED FLOODS AT THIS LOCATION SINCE THEN, ACCORDING TO A LOCAL RESIDENT.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 69 FT³/S (1.95 M³/S) NOV. 20, GAGE HEIGHT, 8.59 FT (2.618 M); MINIMUM DAILY, 3.4 FT³/S (0.096 M³/S) MAY 26-29, GAGE HEIGHT, 8.02 FT (2.444 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 1 TO FEB. 23.)

OCT. 1 TO MAR. 16 JUNE 2 TO SEPT. 15				MAR. 17 TO JUNE 1 SEPT. 16-30			
8.02	4.1	8.4	34	8.02	3.5	8.22	13
8.10	6.2	8.5	51	8.06	4.4	8.3	21
8.18	9.4	8.6	71	8.10	5.6	8.4	34
8.3	21			8.16	8.1	8.6	71

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	5.3	6.2	4.7	4.1	5.0	15	4.2	3.7	4.3	4.1	3.9
2	5.4	5.3	5.4	4.7	4.1	5.0	14	4.0	3.7	4.3	4.1	3.9
3	5.4	5.3	5.2	4.6	4.1	4.9	8.1	3.9	3.7	4.3	4.1	4.1
4	5.4	5.3	5.2	4.5	4.1	4.6	7.3	3.8	3.7	4.3	4.3	4.1
5	5.4	5.3	5.2	4.5	4.1	4.9	8.8	3.7	3.7	4.3	4.3	4.1
6	5.4	5.3	5.2	4.5	4.1	4.6	7.7	3.7	3.7	4.3	4.1	4.1
7	5.4	5.3	5.2	4.5	4.1	4.6	5.6	3.7	3.7	4.3	4.1	4.1
8	5.4	5.3	5.2	4.4	4.1	4.6	5.0	3.7	3.7	4.1	4.1	4.1
9	5.4	5.3	5.2	4.4	4.1	4.6	5.0	3.7	3.7	4.1	4.1	4.1
10	5.6	7.2	5.2	4.4	4.1	4.6	4.7	3.7	3.7	4.1	4.3	4.1
11	5.4	5.7	5.2	4.4	4.1	4.6	4.4	3.6	4.1	4.1	4.5	4.1
12	5.4	7.8	5.2	4.3	4.1	4.6	4.1	3.6	4.0	4.1	4.3	4.1
13	5.3	5.3	5.2	4.3	4.1	4.6	4.1	3.6	4.5	4.1	4.1	4.1
14	5.3	5.0	5.2	4.3	4.3	4.3	4.1	3.5	4.3	4.1	4.1	4.3
15	5.3	5.8	5.0	4.3	4.5	4.1	4.1	3.5	4.5	4.1	4.1	4.3
16	5.3	5.0	5.0	4.2	4.5	3.9	4.1	3.5	4.3	4.1	4.1	4.1
17	5.3	5.0	5.0	4.2	4.5	3.8	3.9	3.5	4.1	4.1	4.1	4.0
18	5.3	5.8	4.9	4.2	4.5	3.9	4.1	3.5	5.3	4.1	4.1	3.9
19	5.3	8.7	4.9	4.2	4.5	4.7	4.1	3.5	4.3	4.3	4.1	3.9
20	5.3	24	4.9	4.2	4.5	11	4.1	3.5	4.3	4.3	4.1	4.6
21	5.3	7.4	4.9	4.2	4.6	10	4.1	3.5	4.3	4.1	4.1	4.0
22	5.3	5.8	4.9	4.2	4.7	6.8	3.9	3.5	4.3	4.1	4.1	3.9
23	5.3	5.6	4.8	4.1	4.8	11	3.9	3.5	4.3	4.1	4.1	3.8
24	5.5	5.6	4.8	4.1	5.1	19	3.9	3.5	4.3	4.1	4.1	3.7
25	5.5	5.3	4.8	4.1	5.5	12	3.9	3.5	4.3	4.1	4.1	3.7
26	5.3	5.3	4.8	4.1	6.5	16	3.9	3.4	4.1	4.1	4.1	3.6
27	5.3	5.3	4.7	4.1	7.1	15	3.9	3.4	4.1	4.1	4.1	3.6
28	5.3	5.8	4.7	4.1	6.5	18	3.9	3.4	4.1	4.1	4.1	3.6
29	5.3	5.8	4.7	4.1	5.3	23	3.9	3.4	5.8	4.1	3.9	3.6
30	5.3	10	4.7	4.1	---	33	4.1	3.7	4.3	4.1	3.9	3.6
31	5.3	---	4.7	4.1	---	16	---	3.8	---	4.1	3.9	---
TOTAL	166.1	192.5	156.2	133.1	134.7	278.7	161.7	112.8	124.6	128.9	127.7	118.5
MEAN	5.36	6.42	5.84	4.29	4.64	8.99	5.39	3.61	4.15	4.16	4.12	3.95
MAX	5.6	24	6.2	4.7	7.1	33	15	4.2	5.8	4.3	4.5	4.3
MIN	5.3	5.0	4.7	4.1	4.1	3.8	3.9	3.4	3.7	4.1	3.9	3.6
MTR YR 1976 TOTAL	1834.7											
MEAN	5.01											
MAX	33											
MIN	3.4											

STREAMS TRIBUTARY TO LAKE SUPERIOR
04026347 PINE CREEK AT MOQUAH, WI--CONTINUED
WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: NOVEMBER 1975 TO SEPTEMBER 1976.

REMARKS.--SEDIMENT RECORDS ARE FAIR. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 20 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 200 MG/L MAR. 30; MINIMUM DAILY MEAN, 1 MG/L SEPT. 28-30. MAXIMUM OBSERVED, 262 MG/L MAR. 29; MINIMUM OBSERVED, 1 MG/L SEPT. 28-30.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 24 TONS (22 TONNES) MAR. 30; MINIMUM DAILY, 0.01 TON (0.01 TONNE) SEPT. 28-30.

WATER QUALITY DATA, NOVEMBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Dec. 3, 1975	1530	0.0	4.74	140	Apr. 1, 1976	1100	2.0	6.73	120
Jan. 5, 1976	1540	-	4.49	130	Apr. 22, 1976	1030	7.0	3.92	130
Jan. 29, 1976	1230	0.0	3.67	140	May 26, 1976	1800	15.0	3.44	130
Feb. 25, 1976	1630	5.5	5.56	150	June 23, 1976	1130	12.0	4.23	120
Mar. 17, 1976	1400	5.5	3.92	135	June 29, 1976	1100	13.0	8.09	140
Mar. 25, 1976	1500	3.5	10.7	140	July 22, 1976	1200	12.0	4.16	130
Mar. 27, 1976	1400	3.0	10.4	-	Sept. 2, 1976	1530	12.0	3.80	120
Mar. 29, 1976	1800	4.5	21.1	130	Sept. 21, 1976	1600	8.5	3.96	
Mar. 30, 1976	1700	1.5	29.3	120					

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	
MAR , 1976	30...	1700	30	101	8.2	38	45	51
JUN	29...	1105	8.1	275	6.0	73	82	86
	29...	1400	31	232	19	72	84	91
DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
MAR , 1976	30...	55	61	64	70	80	97	100
JUN	29...	91	93	93	95	96	100	--
	29...	96	97	99	99	100	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	
JUN , 1976	29...	1140	8.1	0	7	46	61	73	85	96	100

STREAMS TRIBUTARY TO LAKE SUPERIOR
04026347 PINE CREEK AT MOQUAH, WI--CONTINUED

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SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), NOVEMBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
1			---	---	10	.19	12	.17	3	.04	6	.08
2			---	---	10	.16	12	.17	3	.25	6	.08
3			---	---	10	.15	12	.17	3	.04	5	.07
4			---	---	10	.15	12	.35	3	.04	5	.06
5			---	---	10	.15	9	.87	4	.05	5	.06
6			---	---	10	.15	4	.06	4	.05	4	.05
7			---	---	10	.15	4	.53	4	.05	4	.05
8			---	---	10	.15	4	.50	5	.06	4	.05
9			---	---	10	.15	4	.05	5	.07	4	.05
10			---	---	10	.16	4	.05	5	.07	3	.04
11			---	---	11	.16	4	.05	6	.08	3	.04
12			---	---	11	.16	4	.05	6	.09	8	.18
13			4	.05	11	.16	4	.05	7	.10	4	.05
14			4	.05	11	.16	4	.05	8	.11	4	.05
15			4	.05	11	.16	4	.21	8	.11	3	.04
16			4	.05	11	.16	4	.05	9	.12	3	.04
17			4	.05	11	.18	4	.22	10	.13	3	.02
18			4	.05	11	1.0	4	.05	11	.14	2	.02
19			4	.10	11	.16	4	.05	11	.15	3	.04
20			4	.29	11	.16	4	.05	12	.17	19	.78
21			4	.11	11	.16	4	.05	13	.18	13	.41
22			4	.06	11	.16	4	.05	15	.20	5	.09
23			4	.06	11	.16	4	.05	16	.21	23	1.2
24			5	.07	11	.16	4	.05	17	.24	17	.91
25			5	.07	11	.16	4	.05	17	.24	22	.68
26			5	.07	11	.16	4	.05	8	.14	39	2.2
27			5	.07	11	.16	4	.21	10	.21	38	1.8
28			5	.07	12	.17	4	.05	7	.12	73	5.4
29			44	.97	12	.17	3	.04	6	.09	101	10
30			177	5.8	12	.17	2	.02	---	---	208	24
31			---	---	12	.17	2	.02	---	---	36	1.6
MONTH			---	---	---	5.82	---	4.39	---	3.55	---	50.14

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)										
1	43	2.1	13	.14	7	.06	18	.22	15	.17	8	.08
2	52	2.6	8	.08	6	.07	14	.16	12	.13	8	.08
3	26	.64	8	.08	6	.07	6	.07	10	.11	6	.06
4	10	.21	9	.09	6	.07	5	.05	22	.29	6	.06
5	15	.48	9	.09	8	.08	2	.03	15	.18	7	.08
6	29	.69	9	.09	6	.07	2	.02	8	.09	6	.07
7	37	.59	9	.09	5	.05	2	.02	5	.05	3	.04
8	18	.23	9	.08	8	.09	3	.03	4	.05	3	.03
9	19	.23	8	.08	10	.11	3	.03	2	.03	3	.04
10	9	.11	8	.08	12	.13	3	.03	15	.19	6	.07
11	5	.06	8	.08	14	.15	4	.04	31	.48	11	.12
12	4	.05	8	.08	23	.30	4	.05	17	.22	12	.13
13	6	.06	8	.08	33	.41	4	.04	5	.06	12	.14
14	7	.08	9	.09	16	.19	5	.06	5	.05	11	.13
15	8	.09	15	.15	15	.18	5	.06	4	.04	11	.13
16	7	.08	22	.21	17	.20	6	.07	4	.04	11	.11
17	4	.04	17	.16	9	.10	6	.07	4	.04	10	.10
18	3	.03	13	.13	99	1.5	7	.08	4	.04	10	.10
19	4	.04	11	.11	51	.61	14	.18	5	.05	8	.08
20	5	.05	9	.09	13	.15	20	.26	5	.06	7	.08
21	6	.06	8	.07	11	.12	9	.09	5	.06	8	.09
22	7	.07	11	.10	7	.09	10	.11	5	.06	6	.06
23	7	.07	9	.08	8	.10	11	.13	5	.06	6	.06
24	7	.07	12	.11	17	.20	13	.15	6	.06	4	.04
25	8	.08	14	.13	16	.19	15	.17	6	.07	3	.03
26	8	.08	8	.08	7	.08	17	.19	6	.07	4	.04
27	8	.08	8	.07	6	.07	20	.22	6	.07	3	.03
28	9	.09	8	.07	6	.07	23	.26	7	.07	1	.01
29	8	.08	7	.07	105	2.3	26	.29	7	.07	1	.01
30	10	.10	7	.07	35	.41	22	.25	7	.07	1	.01
31	---	---	7	.07	---	---	18	.20	7	.07	---	---
MONTH	---	9.24	---	3.00	---	8.22	---	3.63	---	3.16	---	2.11

STREAMS TRIBUTARY TO LAKE SUPERIOR

04026348 PINE CREEK TRIBUTARY AT MOQUAH, WI

LOCATION.--LAT 46°34'27", LONG 91°03'39", IN SW 1/4 SE 1/4 SEC.1, T.47 N., R.6 W., BAYFIELD COUNTY, HYDROLOGIC UNIT 04010301, AT BRIDGE ON COUNTY TRUNK HIGHWAY 6, 1.1 MI (1.6 KM) EAST OF MOQUAH, AND ABOUT 1.7 MI (2.7 KM) UPSTREAM FROM PINE CREEK.

DRAINAGE AREA.--0.57 MI² (1.48 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--MARCH TO SEPTEMBER 1976.

GAGE.--NONRECORDING GAGE AND CREST-STAGE GAGE. ALTITUDE OF GAGE IS 660 FT (262 M) FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS ARE POOR.

EXTREMES FOR CURRENT YEAR.--MARCH TO SEPTEMBER 1976: MAXIMUM DISCHARGE DURING PERIOD, 23 FT³/S (0.65 M³/S) MAR. 30, GAGE HEIGHT, 5.78 FT (1.762 M); NO FLOW ON MANY DAYS.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	2.5	.02	0			
2						---	2.6	.02	0			
3						---	2.0	.02	0			
4						---	1.9	.02	0			
5						---	1.7	.02	0			
6						---	1.4	.02	0			
7						---	1.4	.02	0			
8						---	1.4	0	0			
9						---	1.2	0	0			
10						---	.69	0	0			
11						---	.39	0	0			
12						---	.28	0	0			
13						---	.22	0	0			
14						---	.10	0	0			
15						---	.06	0	0			
16						---	.06	0	0			
17						---	.06	0	0			
18						---	.22	0	.22			
19						---	.39	0	0			
20						---	.22	0	0			
21						---	.16	0	0			
22						---	.16	0	0			
23						---	.16	0	0			
24						---	.16	0	0			
25						---	2.6	.04	0			
26						---	3.2	.03	0			
27						---	4.1	.03	0			
28						---	5.2	.03	0			
29						---	7.4	.02	0	.26		
30						---	6.9	.02	0	0		
31						---	3.4	---	0	---		---
TOTAL						---	19.80	.14	.50	0	0	0
MEAN						---	.66	.005	.017	0	0	0
MAX						---	2.6	.02	.26	0	0	0
MIN						---	.02	0	0	0	0	0

04026348 PINE CREEK TRIBUTARY AT MOQUAH, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--NOVEMBER 1975 TO SEPTEMBER 1976.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: MARCH TO SEPTEMBER 1976.

REMARKS.--NO FLOW MAY 8 TO JUNE 17, JUNE 18-28, JUNE 30 TO SEPT. 30. SEDIMENT RECORDS ARE POOR. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FDR MORE THAN 20 PERCENT OF THE PERIOD OF FLOW ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 270 MG/L APR. 2; MINIMUM DAILY MEAN, 0 MG/L ON MANY DAYS. MAXIMUM OBSERVED, 270 MG/L APR. 2; MINIMUM OBSERVED, 0 MG/L ON MANY DAYS.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 1.87 TONS (1.70 TONNES) APR. 2; MINIMUM DAILY, 0 TON (0 TONNE) ON MANY DAYS.

WATER QUALITY DATA, NOVEMBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Mar. 25, 1976	1600	1.5	2.57	75	Apr. 1, 1976	1230	2.0	2.07	60
Mar. 29, 1976	1830	4.0	7.40	60	Apr. 22, 1976	0830	6.0	0.09	85
Mar. 30, 1976	1130	1.0	8.67	60	Apr. 22, 1976	0900	6.0	0.11	85
Mar. 31, 1976	1030	1.0	3.50	60	June 29, 1976	1000	16.0	0.10	210
Mar. 31, 1976	1900	1.0	2.66	60	June 29, 1976	1430	16.5	0.20	250

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), MARCH TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)		LDADS (T/DAY)
	MEAN CONCENTRATION (MG/L)	LDADS (T/DAY)	
MARCH			
24	---	---	---
25	2		.01
26	10		.09
27	14		.15
28	4		.06
29	30		.60
30	8		.19
31	28		.26

DAY	MEAN CONCENTRATION (MG/L)											
	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)										
APRIL												
1	8	.05	12	0	0	0	0	0	0	0	0	0
2	270	1.9	10	0	0	0	0	0	0	0	0	0
3	8	.04	44	0	0	0	0	0	0	0	0	0
4	13	.07	16	0	0	0	0	0	0	0	0	0
5	10	.05	12	0	0	0	0	0	0	0	0	0
6	7	.03	12	0	0	0	0	0	0	0	0	0
7	5	.02	10	0	0	0	0	0	0	0	0	0
8	2	.01	0	0	0	0	0	0	0	0	0	0
9	8	.03	0	0	0	0	0	0	0	0	0	0
10	6	.01	0	0	0	0	0	0	0	0	0	0
11	4	0	0	0	0	0	0	0	0	0	0	0
12	5	0	0	0	0	0	0	0	0	0	0	0
13	5	0	0	0	0	0	0	0	0	0	0	0
14	6	0	0	0	0	0	0	0	0	0	0	0
15	8	0	0	0	0	0	0	0	0	0	0	0
16	9	0	0	0	0	0	0	0	0	0	0	0
17	5	0	0	0	0	0	0	0	0	0	0	0
18	6	0	0	0	15	.01	0	0	0	0	0	0
19	8	0	0	0	0	0	0	0	0	0	0	0
20	10	.01	0	0	0	0	0	0	0	0	0	0
21	10	0	0	0	0	0	0	0	0	0	0	0
22	10	0	0	0	0	0	0	0	0	0	0	0
23	10	0	0	0	0	0	0	0	0	0	0	0
24	12	.01	0	0	0	0	0	0	0	0	0	0
25	10	0	0	0	0	0	0	0	0	0	0	0
26	16	0	0	0	0	0	0	0	0	0	0	0
27	18	0	0	0	0	0	0	0	0	0	0	0
28	21	0	0	0	0	0	0	0	0	0	0	0
29	22	0	0	0	20	.02	0	0	0	0	0	0
30	16	0	0	0	0	0	0	0	0	0	0	0
31	---	---	0	0	---	---	0	0	0	0	---	---
MONTH	---	2.23	---	0	---	.03	0	0	0	0	0	0

STREAMS TRIBUTARY TO LAKE SUPERIOR

04026349 PINE CREEK NEAR MOQUAH, WI

LOCATION.--46°32'57", LONG 91°03'47", IN SW 1/4 SE 1/4 SEC.13, T.47 N., R.6 W., BAYFIELD COUNTY, HYDROLOGIC UNIT 04010302, ON RIGHT BANK AT BRIDGE ON TOWN ROAD, 700 FT (213 M) UPSTREAM FROM NORTH FISH CREEK, AND 1.3 MI (2.9 KM) SOUTHEAST OF MOQUAH.

DRAINAGE AREA.--21.5 MI² (55.7 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--NOVEMBER 1975 TO SEPTEMBER 1976.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 670 FT (204 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR NOVEMBER THROUGH FEBRUARY, WHICH ARE POOR.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--FLOOD IN JUNE 1946 EXCEEDED A STAGE OF 20.0 FT (6.10 M), FROM INFORMATION BY LOCAL RESIDENT.

EXTREMES FOR CURRENT YEAR.--NOVEMBER 1975 TO SEPTEMBER 1976: MAXIMUM DISCHARGE DURING PERIOD, 591 FT³/S (16.7 M³/S) MAR. 30, GAGE HEIGHT, 7.26 FT (2.212 M); MINIMUM DAILY, 18 FT³/S (0.51 M³/S) MAR. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		26	39	25	24	21	67	21	21	21	20	20
2		26	44	25	24	21	75	22	21	20	20	20
3		26	28	25	24	21	51	22	21	20	20	20
4		26	26	26	24	20	46	22	21	20	21	21
5		26	26	26	24	20	54	22	20	20	21	21
6		26	25	25	24	20	49	21	21	20	20	20
7		26	25	26	24	19	36	21	21	20	20	20
8		26	25	26	24	19	31	21	21	20	20	20
9		27	25	25	25	19	30	22	21	20	20	20
10		36	25	25	25	19	28	22	21	20	21	20
11		28	25	25	24	19	24	22	21	20	21	21
12		53	25	25	24	20	24	22	21	20	21	21
13		27	25	25	24	19	24	22	22	20	20	21
14		25	25	25	24	19	25	21	21	20	20	21
15		25	25	25	25	19	24	20	21	20	20	21
16		26	25	25	25	19	23	20	21	20	20	21
17		25	25	25	25	18	22	20	20	20	20	21
18		25	26	25	25	19	24	20	25	20	20	21
19		52	25	24	25	23	24	20	21	21	20	21
20		64	24	24	25	40	22	20	21	22	20	21
21		37	24	24	25	58	22	20	21	20	20	21
22		32	24	24	25	50	22	20	21	20	20	21
23		29	24	24	25	66	21	20	21	20	20	21
24		28	25	24	25	110 121	21	20	21	20	20	21
25		27	25	24	24	84 82	21	20	22	20	20	21
26		27	25	24	27	103 99	20	21	21	20	20	21
27		27	25	25	29	705 96	20	21	21	20	20	21
28		26	25	25	27	120 116	20	21	21	20	20	21
29		28	25	24	22	142 135	20	21	29	20	20	21
30		58	25	24	---	245 221	21	21	21	20	20	21
31		---	25	24	---	76	---	21	---	20	20	---
TOTAL	---	940	810	768	717	1593	911	649	642	624	625	622
MEAN	---	31.3	26.1	24.8	24.7	51.4	30.4	20.9	21.4	20.1	20.2	20.7
MAX	---	64	44	26	29	245	75	22	29	22	21	21
MIN	---	25	24	24	22	18	20	20	20	20	20	20

04026349 PINE CREEK NEAR MOQUAH, WI--CONTINUED

WATER QUALITY RECORDS

PERIOD OF RECORD.--SEPTEMBER 1975 TO SEPTEMBER 1976.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: NOVEMBER 1975 TO SEPTEMBER 1976.

INSTRUMENTATION.--SEDIMENT PUMPING SAMPLER SINCE NOVEMBER 1975.

REMARKS.--SEDIMENT RECORDS ARE FAIR. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 20 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 660 MG/L MAR. 30; MINIMUM DAILY MEAN, 1 MG/L JAN. 19-24. MAXIMUM OBSERVED, 2,770 MG/L MAR. 23; MINIMUM OBSERVED, 1 MG/L ON SEVERAL DAYS.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 2.3 TONS (394 TONNES) MAR. 30; MINIMUM DAILY, 0.06 TON (0.05 TONNE) JAN. 19-23.

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WATER QUALITY DATA, SEPTEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
SEP • 1975										
26...	1440	20	120	7.7	8.5	1	--	--	26	47
OCT										
15...	0945	18	105	7.6	7.5	2	--	--	876	44
NOV										
11...	1600	25	140	8.1	5.0	6	--	--	270	320
DEC										
18...	1030	26	140	7.9	.0	3	--	--	23	41
JAN • 1976										
21...	1130	26	70	7.4	.0	2	--	--	811	E160
FEB										
10...	0900	23	165	7.4	.0	3	11.7	64	46	8410
MAR										
17...	0830	16	30	7.7	.0	2	13.6	98	824	510
APR										
01...	1600	105	125	7.7	3.5	160	12.6	99	300	3800
MAY										
12...	1300	21	125	7.8	11.0	2	--	--	21	20
JUN										
06...	0830	21	120	7.6	12.0	4	--	--	440	210
JUL										
21...	1030	20	140	7.9	12.0	7	10.5	102	82600	660
AUG										
11...	0915	23	130	--	12.0	20	9.6	95	1600	6000
SEP										
14...	1600	20	125	--	10.5	4	10.4	96	100	420

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
SEP • 1975										
26...	58	1	16	4.3	1.6	6	.1	.7	69	0
OCT										
15...	55	0	18	3.6	1.9	7	.1	.7	69	0
NOV										
11...	54	0	15	4.1	1.9	7	.1	.9	69	0
DEC										
18...	56	0	15	4.5	2.0	7	.1	.7	74	0
JAN • 1976										
21...	56	0	14	5.0	1.7	6	.1	.6	72	0
FEB										
10...	56	0	15	4.5	1.6	6	.1	.5	70	0
MAR										
17...	58	0	16	4.3	1.7	6	.1	.6	73	0
APR										
01...	48	0	13	3.7	2.2	9	.1	2.0	61	0
MAY										
12...	58	0	15	5.1	1.6	6	.1	.6	71	0
JUN										
06...	57	0	15	4.6	1.6	6	.1	.7	70	0
JUL										
21...	58	2	16	4.3	1.5	5	.1	.7	68	0
AUG										
11...	55	0	15	4.3	1.6	7	.1	.6	68	--
SEP										
14...	52	0	14	4.2	1.5	6	.1	.7	66	--

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).
E ESTIMATED.

STREAMS TRIBUTARY TO LAKE SUPERIOR

04026349 PINE CREEK NEAR MOQUAH, WI--CONTINUED

WATER QUALITY DATA, SEPTEMBER 1975 TO SEPTEMBER 1976

DATE	ALKALINITY AS CaCO ₃ (MG/L)	CARBON DIOXIDE (CD ₂) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SI ₀₂) (MG/L)	DIS-SOLVED SOLIDS (RES)-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
SEP , 1975										
26...	57	2.2	2.9	.6	.4	13	78	74	.11	4.36
OCT										
15...	57	2.8	3.7	.8	.1	13	70	74	.10	3.40
NOV										
11...	57	.9	4.9	1.6	.1	12	76	75	.10	5.13
DEC										
18...	61	1.5	3.4	3.6	.2	13	78	79	.11	2.53
JAN , 1976										
21...	59	4.6	3.3	1.9	.0	12	74	74	.10	5.19
FEB										
10...	57	4.5	3.4	1.1	.1	12	72	73	.10	4.47
MAR										
17...	60	2.3	4.5	1.1	.1	12	78	76	.11	3.79
APR										
01...	50	1.9	3.8	2.5	.1	7.7	78	65	.11	22.1
MAY										
12...	58	1.8	2.6	.3	.0	12	71	72	.10	4.03
JUN										
08...	57	1.8	3.3	2.0	.1	13	77	75	.10	4.37
JUL										
21...	56	1.4	3.0	.8	.1	13	77	73	.10	4.16
AUG										
11...	56	--	3.8	.3	.1	12	64	72	.09	3.97
SEP										
14...	56	--	3.0	1.2	.1	13	77	71	.10	4.16

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO ₃) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCORRECTED PERI-PHYTON CHLOROPHYLL B MG/SQ M	UNCORRECTED PERI-PHYTON CHLOROPHYLL A MG/SQ M
SEP , 1975										
26...	.03	.00	.03	.13	.01	--	--	--	--	--
OCT										
15...	.02	.01	.03	.13	.01	3.4	1.30	2.20	.10	1.9
NOV										
11...	.05	.13	.18	.80	.05	--	--	--	--	--
DEC										
18...	.06	.04	.10	.44	.03	--	--	--	--	--
JAN , 1976										
21...	.08	.15	.23	1.0	.03	.8	.000	.000	.00	.00
FEB										
10...	.12	.10	.22	.97	.04	--	--	--	--	--
MAR										
17...	.07	.10	.17	.75	.03	--	--	--	--	--
APR										
01...	.25	.93	1.2	5.2	.32	17	--	--	--	--
MAY										
12...	.03	.03	.06	.27	.03	--	--	--	--	--
JUN										
08...	.10	.08	.18	.00	.03	--	--	--	--	--
JUL										
21...	.07	.10	.17	.75	.05	3.8	.692	1.62	.00	.68
AUG										
11...	.09	.25	.34	1.5	.06	--	--	--	--	--
SEP										
14...	.04	.00	.04	.18	.03	--	--	--	--	--

04026349 PINE CREEK NEAR MOQUAH, WI--CONTINUED

WATER QUALITY DATA, SEPTEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDEED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUS-PENDEED CADMIUM (CD) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	SUS-PENDEED CHROMIUM (CR) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT , 1975												
15...	0945	10	1	0	1	0	0	0	<10	<10	0	0
JAN , 1976												
21...	1130	26	2	1	1	1	0	1	10	0	10	1
APR												
01...	1600	105	0	0	0	0	0	0	30	20	10	3
JUL												
21...	1030	20	1	0	1	1	0	1	<10	0	<10	1

DATE	SUS-PENDEED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS-PENDEED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS-PENDEED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)
OCT , 1975											
15...	0	0	4	4	0	190	10	7	7	0	10
JAN , 1976											
21...	0	1	0	0	0	100	10	1	0	1	0
APR											
01...	3	0	20	20	0	5200	140	2	0	2	160
JUL											
21...	1	0	0	0	0	350	0	7	6	1	10

DATE	SUS-PENDEED MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDEED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	SUS-PENDEED SELENIUM (SE) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDEED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT , 1975											
15...	0	10	<.5	.0	<.5	0	0	0	10	5	5
JAN , 1976											
21...	0	0	<.5	.0	<.5	0	0	0	10	0	10
APR											
01...	150	10	<.5	.0	<.5	0	0	0	30	20	10
JUL											
21...	10	0	<.5	.0	<.5	0	0	0	10	10	0

PESTICIDE ANALYSES

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TOTAL PCB (UG/L)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLOROCANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)
APR , 1976									
01...	1600	105	.0	.00	.00	.1	.00	.00	.00
MAY									
12...	1300	21	.0	.00	.00	.0	.00	.00	.00

DATE	TOTAL OI-AZINON (UG/L)	TOTAL DI-ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	DIS-SOLVED LINDANE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)
APR , 1976									
01...	.00	.00	.00	.00	.00	.00	--	.00	.00
MAY									
12...	.00	.00	.00	.00	.00	.00	.00	.00	--

DATE	TOTAL METHYL PARA-THION (UG/L)	TOTAL METHYL TRI-THION (UG/L)	TOTAL PARA-THION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRI-THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
APR , 1976								
01...	.00	.00	.00	0	.00	--	--	--

STREAMS TRIBUTARY TO LAKE SUPERIOR

04026349 PINE CREEK NEAR MOQUAH, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, SEPTEMBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method			
Sept. 26, 1975	1440	CHRYSOPHYTA			Grab sample			
		Bacillariophyceae						
		<i>Achnanthes</i>		0				
		<i>Cocconeis</i>	19	4				
		<i>Cymbella</i>	19	4				
		<i>Diatoma</i>	19	4				
		<i>Fragilaria</i>	97	21				
		<i>Gomphonema</i>	19	4				
		<i>Navicula</i>	130	29				
		<i>Nitzschia</i>	110	25				
		<i>Surirella</i>	38	8				
		CYANOPHYTA						
		Myxophyceae						
		<i>Oscillatoria</i>		0				
TOTAL	460							
Oct. 15, 1975	0945	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		<i>Ankistrodesmus</i>	26	8				
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Achnanthes</i>	13	4				
		<i>Cocconeis</i>	26	8				
		<i>Gomphonema</i>	13	4				
		<i>Navicula</i>	120	38				
		<i>Nitzschia</i>	90	29				
		<i>Rhoicosphenia</i>	26	8				
		TOTAL	310					
		Nov. 11, 1975	1600	CHRYSOPHYTA				Grab sample
				Bacillariophyceae				
<i>Achnanthes</i>	29			8				
<i>Cymbella</i>	29			8				
<i>Fragilaria</i>				0				
<i>Navicula</i>	110			33				
<i>Nitzschia</i>	140			42				
<i>Surirella</i>	29			8				
CYANOPHYTA								
Myxophyceae								
<i>Oscillatoria</i>				0				
EUGLENOPHYTA								
Euglenophyceae								
<i>Distigma</i>				0				
TOTAL	350							
Dec. 18, 1975	1030	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		<i>Scenedesmus</i>	33	10				
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Achnanthes</i>	42	13				
		<i>Cocconeis</i>	8	3				
		<i>Cymbella</i>	33	10				
		<i>Fragilaria</i>	33	10				
		<i>Melosira</i>	8	3				
		<i>Navicula</i>	120	36				
		<i>Nitzschia</i>	33	10				
		<i>Surirella</i>	17	5				
		TOTAL	320					
Jan. 21, 1976	1130	CHRYSOPHYTA			Grab sample			
		Bacillariophyceae						
		<i>Achnanthes</i>	37	14				
		<i>Cocconeis</i>		0				
		<i>Melosira</i>		0				
		<i>Navicula</i>	210	79				
		<i>Synedra</i>	19	7				
TOTAL	260							
Feb. 10, 1976	0900	CHRYSOPHYTA			Grab sample			
		Bacillariophyceae						
		<i>Achnanthes</i>	20	6				
		<i>Cocconeis</i>	20	6				
		<i>Fragilaria</i>	98	29				
		<i>Gomphonema</i>		0				
		<i>Gomphonema</i>	20	6				
		<i>Navicula</i>	140	41				
		<i>Nitzschia</i>	39	12				
		<i>Surirella</i>		0				
		CYANOPHYTA						
		Myxophyceae						
		<i>Oscillatoria</i>		0				
		TOTAL	330					

STREAMS TRIBUTARY TO LAKE SUPERIOR
04026349 PINE CREEK NEAR MOQUAH, WI--CONTINUED

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QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, SEPTEMBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Mar. 17, 1976	0830	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		Achnanthes	16	7	
		Cymbella	16	7	
		Epithemia	16	7	
		Gomphonema		0	
		Navicula	160	67	
		Nitzschia	16	7	
		Synedra	16	7	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoria		0	
		TOTAL	250		
Apr. 1, 1976	1600	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		Hantzschia		0	
		Meridion	33	8	
		Navicula	230	58	
		Nitzschia	98	25	
		Rhoicosphenia	33	8	
TOTAL	390				
May 12, 1976	1300	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		Ankistrodesmus	10	2	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Achnanthes	67	16	
		Cocconeis	29	7	
		Cyclotella	10	2	
		Cymbella	19	5	
		Navicula	250	59	
		Nitzschia	29	7	
		Rhoicosphenia		0	
		Chrysophyceae			
Mallomonas	10	2			
TOTAL	420				
June 8, 1976	0830	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		Achnanthes	50	7	
		Cocconeis	88	12	
		Cymbella	75	10	
		Epithemia	13	2	
		Gomphonema	13	2	
		Navicula	350	48	
		Nitzschia	130	17	
		Surirella	13	2	
		TOTAL	730		
July 21, 1976	1030	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		Achnanthes	32	8	
		Cocconeis	16	4	
		Navicula	240	62	
		Nitzschia	32	8	
		Surirella	16	4	
		Chrysophyceae			
		Mallomonas	48	12	
		TOTAL	380		
Aug. 11, 1976	0915	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		Achnanthes	78	11	
		Amphora	16	2	
		Cocconeis	94	13	
		Cymbella	16	2	
		Frustulia		0	
		Gomphonema		0	
		Navicula	170	24	
		Nitzschia	110	16	
		Chrysophyceae			
		Mallomonas	63	9	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoria	160	22	
TOTAL	700				

STREAMS TRIBUTARY TO LAKE SUPERIOR
04026349 PINE CREEK NEAR MOQUAH, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, SEPTEMBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Sept. 14, 1976	1600	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		Coelastrum	52	35	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Achnanthes	20	13	
		Amphora	7	4	
		Cocconeis	26	17	
		Gomphonema		0	
		Navicula	39	26	
		Nitzschia	7	4	
		Rhoicosphenia		0	
		Synedra		0	
		CYANOPHYTA			
		Myxophyceae			
		Anacystis		0	
		TOTAL		150	

WATER QUALITY DATA

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 15, 1975	1800	6.5	18.4	130	Mar. 31, 1976	1800	3.5	60.1	110
Dec. 2, 1975	1500	0.0	29.6	150	Apr. 1, 1976	0930	1.5	39.8	60
Jan. 5, 1976	1400	0.0	26.4	140	Apr. 1, 1976	1800	3.5	116	125
Feb. 25, 1976	1300	5.5	23.0	150	Apr. 22, 1976	1230	7.0	22.0	130
Mar. 17, 1976	1000	0.0	18.9	130	May 12, 1976	1230	11.0	20.7	125
Mar. 25, 1976	1230	1.5	71.3	130	May 26, 1976	1600	15.0	20.3	120
Mar. 27, 1976	1200	2.5	78.1	135	June 23, 1976	1400	14.5	19.8	120
Mar. 29, 1976	1600	5.0	136	130	June 29, 1976	1330	13.0	40.3	160
Mar. 30, 1976	1000	1.5	178	95	Sept. 2, 1976	1330	11.5	19.3	120
Mar. 30, 1976	1700	1.0	209	90	Sept. 21, 1976	1400	8.5	19.2	-
Mar. 31, 1976	1100	3.5	68.2	110					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT CHARGE (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT , 1975					
15...	0945	7.5	18	5	.24

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT CHARGE (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	
MAR , 1976								
30...	0950	178	297	143	31	37	42	
31...	1130	68	72	13	48	60	72	
APR								
01...	1325	56	95	14	50	65	76	
DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
MAR , 1976								
30...		47	52	56	62	73	97	100
31...		81	87	90	94	97	100	--
APR								
01...		87	93	96	98	100	--	--

04026349 PINE CREEK NEAR MOQUAH, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), NOVEMBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			7	.49	46	4.9	9	.62	3	.19	7	.40
2			7	.49	30	3.6	10	.67	8	.52	6	.34
3			7	.49	30	2.3	10	.69	12	.78	6	.34
4			7	.49	27	1.9	11	.77	34	2.2	5	.27
5			7	.49	24	1.7	11	.77	11	.71	5	.27
6			8	.54	21	1.4	9	.61	6	.39	6	.32
7			8	.56	19	1.3	8	.56	3	.21	6	.31
8			8	.56	16	1.1	7	.49	2	.12	5	.26
9			36	3.2	15	.98	6	.40	5	.34	4	.21
10			176	19	13	.87	5	.34	8	.55	5	.26
11			48	4.9	11	.74	4	.27	10	.63	6	.31
12			372	74	10	.68	4	.26	7	.44	7	.38
13			17	1.3	9	.61	3	.20	5	.36	8	.41
14			12	.83	8	.54	3	.20	2	.14	5	.26
15			13	.89	7	.48	2	.14	2	.17	3	.15
16			14	.95	6	.42	2	.13	2	.13	2	.10
17			14	.98	6	.40	2	.13	2	.12	4	.19
18			16	1.1	5	.35	1	.07	6	.37	6	.31
19			423	68	5	.34	1	.06	11	.73	15	.93
20			630	163	6	.39	1	.06	8	.51	241	26
21			31	3.1	6	.39	1	.06	6	.43	305	48
22			20	1.7	6	.39	1	.06	7	.44	208	28
23			21	1.7	6	.40	1	.06	6	.38	545	97
24			21	1.6	7	.46	1	.08	9	.62	170	58
25			22	1.6	7	.47	2	.13	9	.58	42	9.5 10
26			23	1.7	7	.49	2	.13	26	1.9	90	25 30
27			23	1.7	8	.54	2	.13	10	1.4	75	21
28			24	1.7	8	.54	2	.16	12	.87	166	54 73
29			67	6.4	9	.58	3	.19	11	.65	178	85 80
30			446	76	9	.61	3	.19	---	---	600	370 434 223
31			---	---	9	.63	3	.19	---	---	320	70 28 16
MONTH			---	439.46	---	30.50	---	8.82	---	16.88	---	911.52

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	180	45	8	.45	22	1.3	10	.57	10	.50	10	.53
2	236	69	4	.23	20	1.2	6	.35	11	.58	8	.41
3	69	9.5	5	.28	22	1.2	4	.23	10	.54	9	.47
4	95	12	6	.34	13	.75	2	.13	14	.79	10	.54
5	121	18	6	.34	9	.50	4	.19	16	.80	10	.53
6	04	11	6	.32	15	.81	4	.21	9	.46	8	.45
7	26	2.5	5	.28	10	.57	14	.77	4	.19	5	.29
8	10	1.5	5	.28	9	.52	14	.76	4	.20	4	.22
9	22	1.0	5	.28	25	1.4	14	.74	6	.30	4	.23
10	20	1.6	4	.23	23	1.3	13	.73	22	1.2	8	.41
11	16	1.1	4	.23	7	.38	15	.81	22	1.3	11	.58
12	10	.66	5	.28	3	.17	15	.80	12	.66	10	.53
13	8	.53	5	.28	10	.57	15	.78	5	.29	7	.39
14	9	.60	14	.79	8	.44	16	.81	7	.39	4	.23
15	10	.64	5	.28	5	.30	15	.79	6	.33	10	.56
16	8	.52	5	.27	4	.23	15	.77	3	.16	13	.72
17	8	.40	7	.38	3	.14	15	.79	9	.47	13	.72
18	8	.52	6	.32	60	4.7	15	.80	10	.51	9	.46
19	10	.68	10	.54	12	.68	19	1.1	9	.46	8	.46
20	12	.69	16	.86	3	.17	107	6.6	10	.53	5	.29
21	14	.83	14	.76	8	.43	22	1.2	9	.48	7	.40
22	14	.86	10	.54	12	.70	18	.99	11	.54	8	.43
23	7	.39	8	.43	18	1.0	14	.74	13	.64	9	.48
24	6	.33	20	1.1	19	1.1	10	.52	14	.75	9	.49
25	4	.24	18	.97	21	1.2	8	.43	14	.78	8	.43
26	3	.16	25	1.4	15	.86	8	.43	12	.63	8	.46
27	5	.27	23	1.3	11	.61	9	.47	9	.49	8	.45
28	8	.43	28	1.6	13	.72	10	.56	10	.52	2	.12
29	6	.32	31	1.7	181	20	9	.49	11	.61	2	.09
30	8	.45	47	2.7	37	2.1	10	.50	12	.66	2	.11
31	---	---	32	1.8	---	---	9	.46	12	.67	---	---
MONTH	---	182.52	---	21.56	---	46.05	---	25.51	---	17.51	---	12.48

STREAMS TRIBUTARY TO LAKE SUPERIOR
04026870 ALDER CREEK NEAR UPSON, WI

LOCATION.--LAT 46°23'09", LONG 90°24'30", IN SE 1/4 SE 1/4 SEC.7; T.45 N., R.1 E., IRON COUNTY, HYDROLOGIC UNIT 04010302, ON RIGHT BANK 10 FT (3 M) UPSTREAM FROM STATE HIGHWAY 122 BRIDGE AND 1.0 MI (1.6 KM) NORTH OF UPSON.

DRAINAGE AREA.--22.3 MI² (57.8 KM²).

PERIOD OF RECORD.--APRIL 1972 TO CURRENT YEAR.

REVISED RECORDS.--WRD WIS. 1974: 1972, 1973(M).

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 1,380.24 FT (420.697 M) ABOVE MEAN SEA LEVEL. PRIOR TO MAY 16, 1972, NONRECORDING GAGE AT SAME SITE AND DATUM.

REMARKS.--RECORDS FAIR EXCEPT THOSE FOR WINTER PERIOD, PERIODS OF NO GAGE-HEIGHT RECORD, AND DISCHARGE BELOW 3 FT³/S (0.085 M³/S), WHICH ARE POOR.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 702 FT³/S (19.9 M³/S) AUG. 17, 1972, GAGE HEIGHT, 7.29 FT (2.222 M); MINIMUM DAILY, 0.01 FT³/S (0.0003 M³/S) SEPT. 7-11, 1976.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 440 FT³/S (12.5 M³/S) APR. 14, 15, GAGE HEIGHT, 6.60 FT (2.012 M); MINIMUM DAILY, 0.01 FT³/S (0.0003 M³/S) SEPT. 7-11.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 25 TO DEC. 2, DEC. 4 TO APR. 6.)

2.6	.01	3.4	15
2.7	.03	3.5	20
2.8	.10	4.0	53
2.9	.61	5.0	142
3.0	2.1	6.0	290
3.2	6.7	7.0	580

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	4.9	56	12	8.0	14	170	32	8.8	2.8	.64	.02
2	4.5	3.6	50	12	8.0	12	170	48	5.8	2.2	.60	.02
3	4.2	3.2	46	12	8.0	11	160	64	4.4	1.9	.58	.02
4	2.1	2.8	40	12	8.0	10	160	73	3.6	1.7	.56	.02
5	1.5	3.2	36	12	8.0	9.4	160	87	3.1	1.5	.60	.02
6	1.0	3.6	42	12	8.0	8.6	190	77	2.5	1.3	.68	.02
7	1.0	3.4	40	12	8.0	8.0	317	53	2.1	1.2	.60	.01
8	1.9	5.1	35	12	8.0	7.4	319	37	1.9	1.1	.50	.01
9	1.3	5.5	32	11	8.0	7.0	308	28	1.7	1.0	.36	.01
10	1.3	27	29	11	8.0	6.6	377	22	1.6	.92	.32	.01
11	1.3	55	28	10	8.2	6.4	346	16	1.5	.86	.37	.01
12	1.0	66	26	10	8.2	6.2	235	15	1.4	.80	.37	.02
13	.91	61	25	9.6	8.6	6.2	206	18	1.4	.76	.32	.02
14	1.9	52	24	9.6	9.2	6.0	323	13	1.4	.72	.25	.04
15	3.6	36	23	9.4	11	6.0	437	9.9	1.4	.68	.20	.06
16	1.7	26	24	9.2	12	6.0	356	8.8	1.6	2.0	.18	.06
17	3.2	27	26	9.2	12	6.0	235	9.5	2.2	1.7	.14	.06
18	1.3	31	28	9.0	11	6.0	150	14	5.0	1.4	.12	.06
19	.70	52	25	8.8	10	6.6	120	6.4	20	1.2	.08	.07
20	1.0	102	23	8.6	18	8.0	100	4.2	13	20	.05	.12
21	1.2	107	21	8.6	9.8	10	80	4.9	10	10	.04	.12
22	1.5	103	19	8.6	10	18	62	4.4	8.0	6.0	.02	.14
23	2.8	83	18	8.4	10	18	50	4.0	6.0	4.0	.02	.14
24	13	71	16	8.4	11	16	42	4.2	5.0	3.0	.02	.18
25	34	50	15	8.2	12	19	37	4.0	7.0	2.0	.02	.20
26	34	41	14	8.0	15	25	32	3.8	5.0	1.7	.02	.25
27	24	38	13	8.0	15	50	28	3.6	3.2	1.5	.02	.32
28	19	34	13	8.0	15	44	22	6.1	2.5	1.2	.02	1.1
29	24	32	12	8.0	14	60	15	6.4	1.9	1.0	.02	1.9
30	11	40	12	8.0	---	80	18	4.4	4.0	.80	.02	1.9
31	6.7	---	11	8.0	---	190	---	9.9	---	.70	.02	---
TOTAL	211.11	1169.3	822	301.8	292.0	687.4	5225	691.5	137.0	77.64	7.76	6.93
MEAN	6.81	39.0	26.5	9.74	10.1	22.2	174	22.3	4.57	2.50	.25	.23
MAX	34	107	56	12	15	190	437	87	20	20	.68	1.9
MIN	.70	2.8	11	8.0	8.0	6.0	15	3.6	1.4	.68	.02	.01
CFSM	.31	1.75	1.19	.44	.45	1.00	7.80	1.00	.20	.11	.01	.01
IN.	.35	1.95	1.37	.50	.49	1.15	8.72	1.15	.23	.13	.01	.01

CAL YR 1975 TOTAL 8037.05 MEAN 22.0 MAX 431 MIN .10 CFSM .99 IN 13.41
WTR YR 1975 TOTAL 9629.44 MEAN 26.3 MAX 437 MIN .01 CFSM 1.18 IN 16.06

NOTE.--NO GAGE-HEIGHT RECORD DEC. 27 TO JAN. 4, JAN. 28 TO FEB. 2, MAR. 15-17, JUNE 6 TO AUG. 9.

STREAMS TRIBUTARY TO LAKE SUPERIOR

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04027000 BAD RIVER NEAR ODANAH, WI
(NATIONAL STREAM-QUALITY ACCOUNTING NETWORK STATION)

LOCATION.--LAT 46°29'15", LONG 90°41'45", IN SE 1/4 SEC.2, T.46 N., R.3 W., ASHLAND COUNTY, HYDROLOGIC UNIT 04010302, ON LEFT BANK JUST DOWNSTREAM FROM ELM HOIST BRIDGE, 5.0 MI (8.0 KM) DOWNSTREAM FROM POTATO RIVER, 8.5 MI (13.7 KM) SOUTH OF ODANAH, AND 23 MI (37 KM) FROM MOUTH.

DRAINAGE AREA.--611 MI² (1,582 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--JULY 1914 TO DECEMBER 1922 (MONTHLY DISCHARGE ONLY FOR SOME PERIODS PUBLISHED IN WSP 1307), MAY 1948 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1207: DRAINAGE AREA. WSP 1337: 1922.

GAGE.--WATER-STAGE RECORDER, DATUM OF GAGE IS 668.30 FT (203.698 M) ABOVE MEAN SEA LEVEL. MAY 17, 1948, TO NOV. 6, 1959, AND OCT. 19, 1960, TO NOV. 23, 1961, WATER-STAGE RECORDER. NOV. 7, 1959, TO OCT. 18, 1960, AND NOV. 24, 1961, TO JULY 12, 1962, NONRECORDING GAGE. PRIOR TO NOV. 11, 1922, WATER-STAGE RECORDER AT SITE 2 MI (3 KM) DOWNSTREAM AT DIFFERENT DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

AVERAGE DISCHARGE.--36 YEARS (1914-22, 1948-76), 616 FT³/S (17.44 M³/S), 13.69 IN/YR (348 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 27,700 FT³/S (784 M³/S) APR. 24, 1960, GAGE HEIGHT, 21.7 FT (6.61 M) FROM FLOODMARKS AND FROM RATING CURVE EXTENDED ABOVE 12,000 FT³/S (340 M³/S) AND A COMPARISON WITH CONTRACTED-OPENING MEASUREMENT OF PEAK FLOW 45,600 FT³/S (1,290 M³/S) AT ODANAH, DRAINAGE AREA APPROXIMATELY 970 MI² (2,510 KM²); MINIMUM 49 FT³/S (1.39 M³/S) AUG. 8, 1964, GAGE HEIGHT, 2.03 FT (0.619 M).

EXTREMES OUTSIDE THE PERIOD OF RECORD.--FLOOD OF JUNE 24, 1946, REACHED A STAGE OF AT LEAST 22.2 FT (6.77 M), TOP OF DOWNSTREAM BRIDGE SUBMERGED. INFORMATION FROM INDIAN SERVICE.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 9,910 FT³/S (260 M³/S) MAR. 30, GAGE HEIGHT, 12.12 FT (3.694 M), NO OTHER PEAK ABOVE BASE OF 3,000 FT³/S (85.0 M³/S); MAXIMUM GAGE HEIGHT, 12.54 FT (3.822 M) MAR. 29 (BACKWATER FROM ICE); MINIMUM DISCHARGE, 61 FT³/S (1.73 M³/S) AUG. 28-30, SEPT. 13, GAGE HEIGHT, 2.08 FT (0.634 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 30 TO MAR. 29.)

2.0	40	4.0	830
2.1	66	6.0	2,260
2.3	119	9.0	5,000
3.0	336	12.0	9,100

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	206	1200	280	200	500	4580	717	284	199	67	65
2	114	192	1100	280	200	450	4210	932	253	165	66	65
3	109	183	1000	270	200	410	4430	1200	217	142	65	64
4	108	171	940	260	200	390	3610	1210	193	128	69	65
5	100	164	860	250	200	370	3710	1170	175	119	109	63
6	97	159	820	240	200	370	4470	1040	163	112	164	63
7	98	158	780	240	200	370	5050	848	154	111	154	63
8	97	170	720	230	200	370	4990	709	149	109	131	63
9	94	190	660	220	200	370	4780	616	142	102	113	63
10	95	406	600	220	200	360	5360	543	139	100	187	63
11	97	762	560	210	200	360	5280	478	140	98	112	63
12	100	1090	520	210	200	360	4060	421	132	94	189	63
13	105	1120	480	200	200	360	3410	392	138	88	184	61
14	107	811	460	200	210	360	3600	384	154	84	95	68
15	108	899	440	200	230	360	4870	365	164	86	91	73
16	108	638	470	200	290	360	4590	337	193	93	86	74
17	110	650	480	200	370	360	3830	317	220	91	83	74
18	108	667	480	200	450	370	3140	308	443	85	88	74
19	108	904	460	190	470	400	3050	285	1060	80	78	78
20	108	1970	420	190	460	700	2560	266	802	92	74	82
21	108	1580	400	190	420	2000	2020	246	553	104	68	87
22	109	1610	380	190	400	2700	2210	233	375	103	66	87
23	115	1490	370	190	350	2900	2030	221	279	99	66	87
24	170	1200	360	190	370	3300	1660	213	228	94	65	87
25	402	880	350	200	410	3800	1330	204	202	85	63	84
26	446	764	340	200	450	4100	1080	195	190	82	63	84
27	368	728	330	200	500	4500	900	188	160	77	63	89
28	315	726	320	200	560	5000	754	176	151	75	62	92
29	274	692	310	200	540	6200	698	172	155	73	61	92
30	247	960	300	200	---	8050	636	197	211	71	61	92
31	219	---	290	200	---	6260	---	263	---	70	62	---
TOTAL	4861	22140	17200	6650	9080	56760	96890	14838	7828	3111	2657	2228
MEAN	157	738	555	215	313	1831	3230	479	261	100	85.7	74.3
MAX	446	1970	1200	280	560	8050	5360	1210	1060	199	164	92
MIN	94	158	290	190	200	360	636	172	132	70	61	61
CFSM	.26	1.21	.91	.35	.51	3.00	5.29	.78	.43	.16	.14	.12
IN.	.30	1.35	1.05	.40	.55	3.46	5.90	.90	.48	.19	.16	.14
CAL YR 1975 TOTAL	196764		MEAN 539	MAX 6330	MIN 68	CFSM .88	IN 11.98					
WTR YR 1976 TOTAL	244243		MEAN 667	MAX 8050	MIN 61	CFSM 1.09	IN 14.87					

STREAMS TRIBUTARY TO LAKE SUPERIOR

04027000 BAD RIVER NEAR ODANAH, WI--CONTINUED
(NATIONAL STREAM QUALITY ACCOUNTING NETWORK STATION)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1964-65, 1968, 1972 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: SEPTEMBER 1975 TO CURRENT YEAR.
WATER TEMPERATURES: SEPTEMBER 1975 TO CURRENT YEAR.

INSTRUMENTATION.--WATER-QUALITY MONITOR SINCE SEPT. 26, 1975.

REMARKS.--WATER-QUALITY MONITOR INOPERATIVE PART OF YEAR. HOURLY RECORDS OF SPECIFIC CONDUCTANCE AND WATER TEMPERATURES AVAILABLE IN FILES OF DISTRICT OFFICE.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT , 1975										
15...	1415	100	185	7.7	10.5	2	--	--	23	20
NOV										
12...	1100	1090	100	7.6	2.0	35	--	--	8730	600
DEC										
18...	1430	400	140	7.4	.0	3	--	--	616	22
JAN , 1976										
20...	1300	193	100	7.6	.0	2	--	--	84	816
FEB										
09...	1430	197	180	7.3	.0	2	11.1	80	816	25
MAR										
16...	1400	345	140	6.7	.0	4	12.2	88	84	88
APR										
20...	1330	2560	60	7.4	11.0	15	--	--	34	47
MAY										
11...	1130	475	100	7.4	13.5	5	--	--	24	270
JUN										
07...	1300	145	150	7.6	22.5	3	--	--	86	85
JUL										
20...	1200	95	190	7.7	24.0	6	6.0	74	83	180
AUG										
10...	1245	102	175	--	23.0	7	7.4	69	67	87
SEP										
14...	1350	69	215	--	16.5	10	8.0	89	44	42

DATE	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
OCT , 1975										
15...	91	8	25	6.9	3.7	8	.2	1.1	101	0
NOV										
12...	51	14	14	4.0	2.5	9	.2	1.2	46	0
DEC										
18...	56	6	15	4.5	2.7	9	.2	.8	61	0
JAN , 1976										
20...	64	3	16	5.0	2.6	8	.1	.7	74	0
FEB										
09...	64	2	17	5.3	2.7	8	.1	.5	76	0
MAR										
16...	54	6	15	4.0	2.4	9	.1	.6	58	0
APR										
20...	24	6	6.7	1.7	1.1	9	.1	.7	22	0
MAY										
11...	47	6	12	4.1	1.9	8	.1	.6	50	0
JUN										
07...	84	8	23	6.4	4.9	11	.2	1.1	92	0
JUL										
20...	91	1	25	7.0	4.0	9	.2	1.1	110	0
AUG										
10...	84	3	23	6.4	3.4	8	.2	.9	99	--
SEP										
14...	96	0	26	7.6	3.9	8	.2	1.1	123	--

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

04027000 BAD RIVER NEAR ODANAH, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	ALKALINITY AS CaCO ₃ (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
OCT , 1975										
15...	83	3.2	6.1	2.8	.2	12	108	108	.15	31.5
NOV										
12...	38	1.8	12	3.8	.3	10	94	70	.13	277
DEC										
18...	50	3.9	10	3.2	.2	14	105	80	.14	136
JAN , 1976										
20...	61	3.0	8.8	3.3	.2	14	99	88	.13	51.6
FEB										
09...	62	6.1	8.2	2.7	.2	14	102	88	.14	54.3
MAR										
16...	48	19	9.9	2.8	.1	13	97	76	.13	90.4
APR										
20...	18	1.4	6.0	1.5	.1	5.6	49	35	.07	339
MAY										
11...	41	3.2	5.8	2.0	.1	6.5	75	58	.10	96.2
JUN										
07...	75	3.7	5.6	8.6	.1	8.7	118	104	.16	46.2
JUL										
20...	90	3.5	13	2.8	.1	8.4	113	116	.15	29.0
AUG										
10...	81	--	4.8	1.2	.1	8.9	101	98	.14	27.8
SEP										
14...	101	--	5.0	2.4	.1	9.5	130	116	.18	24.2

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO ₃) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PERI-PHYTON BIOMASS ASH WEIGHT (G/SQ M)	PERI-PHYTON BIOMASS DRY WEIGHT (G/SQ M)	UNCORRECTED PERI-PHYTON CHLORO-PHYLL B (MG/SQ M)	UNCORRECTED PERI-PHYTON CHLORO-PHYLL A (MG/SQ M)
OCT , 1975										
15...	.01	.20	.21	.93	.01	6.2	.200	.400	.00	.00
NOV										
12...	.27	.68	.95	4.2	.10	--	--	--	--	--
DEC										
18...	.22	.51	.73	3.2	.03	--	--	--	--	--
JAN , 1976										
20...	.26	.34	.60	2.7	.04	8.4	.200	.200	.10	.20
FEB										
09...	.33	.36	.69	3.1	.04	--	--	--	--	--
MAR										
16...	.27	.42	.69	3.1	.03	--	--	--	--	--
APR										
20...	.06	.60	.66	2.9	.07	13	--	--	--	--
MAY										
11...	.06	.40	.46	2.0	.04	--	--	--	--	--
JUN										
07...	.13	.35	.48	2.1	.04	--	--	--	--	--
JUL										
20...	--	--	--	--	--	6.4	4.00	6.00	.84	4.2
AUG										
10...	.05	.38	.43	1.9	.05	--	--	--	--	--
SEP										
14...	.01	.20	.21	.93	.04	--	--	--	--	--

STREAMS TRIBUTARY TO LAKE SUPERIOR
04027000 BAO RIVER NEAR ODANAH, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDEO ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDEO CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDEO CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT , 1975												
15...	1415	108	0	0	0	0	0	0	<10	<10	0	0
JAN , 1976												
20...	1300	193	2	0	2	1	1	0	10	0	10	1
APR												
20...	1330	2560	0	0	0	0	0	0	10	0	10	0
JUL												
20...	1200	95	2	2	0	1	1	0	<10	0	<10	1

DATE	SUS- PENDEO COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDEO COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS- PENDEO LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)
OCT , 1975											
15...	0	0	12	12	0	430	180	14	14	0	50
JAN , 1976											
20...	1	0	0	0	0	400	280	1	1	0	10
APR											
20...	0	0	0	0	0	920	230	4	1	3	30
JUL											
20...	1	0	0	0	0	370	30	7	6	1	50

DATE	SUS- PENDEO MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS- PENDEO MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDEO SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDEO ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT , 1975											
15...	20	30	<.5	.0	<.5	0	0	0	30	20	8
JAN , 1976											
20...	0	10	<.5	.0	<.5	0	0	0	10	0	10
APR											
20...	20	10	<.5	.0	<.5	0	0	0	10	0	10
JUL											
20...	30	20	<.5	.0	<.5	1	1	0	0	0	0

04027000 BAD RIVER NEAR ODANAH, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method			
Oct. 15, 1975	1415	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		<i>Ankistrodesmus</i>	26	6				
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Achnanthes</i>	26	6				
		<i>Cocconeis</i>	8	2				
		<i>Cyclotella</i>	35	7				
		<i>Diatoma</i>	26	6				
		<i>Epithemia</i>	8	2				
		<i>Gomphonema</i>	17	4				
		<i>Melosira</i>	17	4				
		<i>Navicula</i>	200	43				
		<i>Nitzschia</i>	79	17				
		<i>Rhoicosphenia</i>	8	2				
		<i>Surirella</i>		0				
		Chrysophyceae						
		<i>Ochromonas</i>	17	4				
		TOTAL	470					
Nov. 12, 1975	1100	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		<i>Ankistrodesmus</i>	450	6				
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Achnanthes</i>	220	3				
		<i>Amphora</i>	220	3				
		<i>Cocconeis</i>	680	9				
		<i>Cyclotella</i>	220	3				
		<i>Diatoma</i>	680	9				
		<i>Epithemia</i>	220	3				
		<i>Gomphonema</i>	910	12				
		<i>Melosira</i>	910	12				
		<i>Navicula</i>	1,500	21				
		<i>Nitzschia</i>	1,300	18				
		TOTAL	7,500					
		Dec. 18, 1975	1430	CHLOROPHYTA				Grab sample
				Chlorophyceae				
				<i>Ankistrodesmus</i>		4	5	
<i>Pteromonas</i>	11			15				
<i>Scenedesmus</i>	23			30				
CHRYSOPHYTA								
Bacillariophyceae								
<i>Fragilaria</i>	8			10				
<i>Navicula</i>	8			10				
<i>Nitzschia</i>	19			25				
<i>Stauroneis</i>				0				
Chrysophyceae								
<i>Dinobryon</i>	4			5				
TOTAL	77							
Jan. 20, 1976	1300	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		<i>Ankistrodesmus</i>	3	7				
		<i>Oocystis</i>		0				
		<i>Scenedesmus</i>		0				
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Achnanthes</i>	12	29				
		<i>Cymbella</i>		0				
		<i>Epithemia</i>		0				
		<i>Gomphonema</i>	3	7				
		<i>Melosira</i>		0				
		<i>Neridion</i>		0				
		<i>Navicula</i>	18	43				
		<i>Nitzschia</i>	3	7				
		<i>Rhopalodia</i>		0				
		<i>Surirella</i>		0				
		<i>Synedra</i>	3	7				
		CYANOPHYTA						
Myxophyceae								
<i>Anacystis</i>		0						
EUGLENOPHYTA								
Cryptophyceae								
<i>Cryptomonas</i>		0						
TOTAL	42							

STREAMS TRIBUTARY TO LAKE SUPERIOR
04027000 BAD RIVER NEAR ODANAH, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Feb. 9, 1976	1430	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Staurastrum</i>		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>		0	
		<i>Asterionella</i>		0	
		<i>Cocconeis</i>		0	
		<i>Epithemia</i>	10	8	
		<i>Gomphonema</i>	10	8	
		<i>Melosira</i>		0	
		<i>Meridion</i>		0	
		<i>Navicula</i>	42	33	
		<i>Nitzschia</i>	42	33	
		<i>Rhicosphenia</i>		0	
<i>Synedra</i>	21	17			
TOTAL	120				
Mar. 16, 1976	1400	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Pteromonas</i>	7	4	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	7	4	
		<i>Amphora</i>		0	
		<i>Fragilaria</i>	10	6	
		<i>Gomphonema</i>	7	4	
		<i>Melosira</i>	14	8	
		<i>Meridion</i>	3	2	
		<i>Navicula</i>	31	18	
		<i>Nitzschia</i>	21	12	
		<i>Rhopalodia</i>	3	2	
		<i>Synedra</i>	10	6	
		<i>Tabellaria</i>		0	
		CYANOPHYTA			
		Myxophyceae			
		<i>Oscillatoria</i>	55	33	
TOTAL	170				
Apr. 20, 1976	1330	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	17	8	
		<i>Oocystis</i>	9	4	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	17	8	
		<i>Asterionella</i>	9	4	
		<i>Cyclotella</i>	9	4	
		<i>Eunotia</i>	9	4	
		<i>Fragilaria</i>	44	19	
		<i>Melosira</i>	17	8	
		<i>Meridion</i>	26	12	
		<i>Navicula</i>	9	4	
		<i>Nitzschia</i>	44	19	
<i>Surirella</i>	9	4			
<i>Synedra</i>	9	4			
TOTAL	230				
May 11, 1976	1130	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	8	2	
		<i>Chlamydomonas</i>	4	1	
		<i>Chlorella</i>	12	3	
		<i>Oocystis</i>	17	4	
		<i>Scenedesmus</i>	17	4	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	58	14	
		<i>Amphora</i>	4	1	
		<i>Cocconeis</i>	4	1	
		<i>Cyclotella</i>	4	1	
		<i>Cymbella</i>	58	14	
		<i>Fragilaria</i>	17	4	
		<i>Gomphonema</i>	46	11	
		<i>Meridion</i>	4	1	
		<i>Navicula</i>	58	14	
		<i>Nitzschia</i>	58	14	
<i>Rhicosphenia</i>	8	2			
<i>Synedra</i>	42	10			
TOTAL	420				

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
June 7, 1976	1300	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	510	4	
		<i>Dictyosphaerium</i>	6,400	57	
		<i>Kirchneriella</i>	170	1	
		<i>Mougeotia</i>	85	1	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	170	1	
		<i>Cyclotella</i>	420	4	
		<i>Cymbella</i>	85	1	
		<i>Nelosira</i>	170	1	
		<i>Navicula</i>	170	1	
		<i>Nitzschia</i>	510	4	
CYANOPHYTA					
Myxophyceae					
<i>Anacystis</i>	2,600	23			
TOTAL		11,000			
July 20, 1976	1200	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	550	26	
		<i>Dictyosphaerium</i>	180	8	
		<i>Scenedesmus</i>	180	8	
		<i>Selenastrum</i>	88	4	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Caloneis</i>	44	2	
		<i>Cyclotella</i>	180	8	
		<i>Navicula</i>	490	22	
		<i>Neidium</i>	0	0	
		<i>Nitzschia</i>	420	19	
		<i>Synedra</i>	22	1	
CYANOPHYTA					
Myxophyceae					
<i>Agmenellum</i>		0			
PYRRHOPHYTA					
Dinophyceae					
<i>Gymnodinium</i>	22	1			
TOTAL		2,200			
Aug. 10, 1976	1245	CHLOROPHYTA			Grab- sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	300	11	
		<i>Cosmarium</i>		0	
		<i>Selenastrum</i>	200	7	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	300	11	
		<i>Cocconeis</i>	150	5	
		<i>Cyclotella</i>	650	24	
		<i>Gomphonema</i>	50	2	
		<i>Meridion</i>	50	2	
		<i>Navicula</i>	350	13	
		<i>Nitzschia</i>	300	11	
<i>Synedra</i>	50	2			
CYANOPHYTA					
Myxophyceae					
<i>Anacystis</i>	200	7			
EUGLENOPHYTA					
Cryptophyceae					
<i>Chroomonas</i>	150	5			
TOTAL		2,800			
Sept. 14, 1976	1350	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	7	2	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Amphora</i>	7	2	
		<i>Caloneis</i>		0	
		<i>Cocconeis</i>		0	
		<i>Cyclotella</i>	7	2	
		<i>Diatoma</i>	15	4	
		<i>Epithemia</i>	7	2	
		<i>Gomphonema</i>		0	
		<i>Nelosira</i>	59	14	
		<i>Navicula</i>	73	18	
<i>Neidium</i>	15	4			
<i>Nitzschia</i>	44	11			
<i>Tabellaria</i>		0			
CYANOPHYTA					
Myxophyceae					
<i>Agmenellum</i>	180	43			
EUGLENOPHYTA					
Cryptophyceae					
<i>Cryptomonas</i>		0			
TOTAL		410			

STREAMS TRIBUTARY TO LAKE SUPERIOR
04027000 BAD RIVER NEAR ODANAH, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 2, 1975	1130	8.0	112	175	May 20, 1976	1140	-	262	150
Oct. 31, 1975	1030	5.0	212	145	June 3, 1976	1150	-	212	160
Jan. 20, 1976	1500	0.0	193	100	June 7, 1976	1200	22.5	145	150
Feb. 9, 1976	1600	0.0	197	180	June 14, 1976	1115	-	160	190
Mar. 16, 1976	1430	0.0	345	140	June 23, 1976	1140	-	279	125
Mar. 31, 1976	1500	2.0	5,890	60	July 7, 1976	1120	-	111	185
Apr. 20, 1976	1500	11.0	2,560	60	July 20, 1976	1200	24.0	95	190
Apr. 25, 1976	1330	-	1,280	95	July 21, 1976	1130	-	106	200
Apr. 28, 1976	1030	4.5	763	160	Aug. 1, 1976	1400	-	69	220
May 7, 1976	1220	-	854	100	Aug. 10, 1976	1700	23.0	102	175
May 12, 1976	1150	-	419	120	Sept. 14, 1976	1330	18.5	69	215

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .062 MM
OCT , 1975						
02...	1130	8.0	112	6	1.8	--
05...	1510	--	100	23	6.2	--
12...	1423	--	106	11	3.1	--
15...	1415	10.5	108	1	.29	--
31...	1000	5.0	212	6	3.4	--
NOV						
06...	1150	--	163	3	1.3	--
09...	1402	--	188	18	9.1	--
12...	1100	2.0	1090	94	277	--
DEC						
18...	1430	.0	480	5	6.5	--
JAN , 1976						
20...	1300	.0	193	1	.52	100
FEB						
09...	1430	.0	197	1	.53	--
MAR						
16...	1400	.0	345	1	.93	100
31...	1500	2.0	5890	514	8170	37
APR						
20...	1330	11.0	2560	111	767	55
25...	1330	--	1280	42	145	--
MAY						
07...	1220	--	854	18	42	--
12...	1150	--	419	13	15	--
20...	1140	--	262	12	8.5	--
JUN						
03...	1150	--	212	8	4.6	--
07...	1300	22.5	145	4	1.6	100
14...	1115	--	160	12	5.2	--
23...	1140	--	279	14	11	--
JUL						
07...	1120	--	111	10	3.0	--
20...	1200	24.0	95	12	3.1	80
21...	1130	--	106	14	4.0	--
AUG						
01...	1400	--	69	34	6.3	--
10...	1245	23.0	102	14	3.9	100
SEP						
14...	1350	18.5	69	11	2.0	92

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
MAR , 1976							
31...	1500	5890	514	8170	10	12	14
MAR , 1976							
31...	18	28	37	46	65	95	100

STREAMS TRIBUTARY TO LAKE SUPERIOR

04027496 WHITE RIVER NEAR SANBORN, WI

LOCATION.--LAT 46°29'37", LONG 90°55'18", IN SW 1/4 NW 1/4 SEC.6, T.46N., R.4W., ASHLAND COUNTY, HYDROLOGIC UNIT, 04010302, AT NONRECORDING GAGE 0.7 MI (1.1 KM) WEST OF DAM AT STATE HIGHWAY 12, AND ABOVE RESERVOIR POND.

DRAINAGE AREA.--NOT DETERMINED.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--FEBRUARY TO SEPTEMBER 1976.

WATER QUALITY DATA, FEBRUARY TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
JUN , 1976										
07...	1615	181	175	8.5	24.0	5	--	--	90	2
JUL										
20...	1615	162	190	8.3	24.0	6	8.8	108	87	0
SEP										
21...	1230	149	165	8.2	10.5	10	--	--	90	0

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (MCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CAC03 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
JUN , 1976										
07...	25	6.8	2.9	6	.1	.9	108	0	89	.5
JUL										
20...	24	6.5	3.0	7	.1	.8	106	0	87	.9
SEP										
21...	24	7.4	2.5	6	.1	.0	119	0	98	1.2

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 100 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
JUN , 1976									
07...	2.6	.6	.1	11	108	103	.15	52.8	.02
JUL									
20...	7.7	.5	.1	12	110	107	.15	46.1	.01
SEP									
21...	3.7	1.4	.1	13	102	112	.14	41.0	.01

DATE	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PERI-PHYTON BIOMASS ASH WEIGHT (MG/SQ M)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT (MG/SQ M)	UNCORRECTED PERI-PHYTON CHLOROPHYLL B (MG/SQ M)	UNCORRECTED PERI-PHYTON CHLOROPHYLL A (MG/SQ M)
JUN , 1976									
07...	.23	.25	1.1	.03	3.0	--	--	--	--
JUL									
20...	.18	.19	.84	.03	--	6.31	7.54	.88	8.6
SEP									
21...	.18	.19	.84	.08	2.0	--	--	--	--

STREAMS TRIBUTARY TO LAKE SUPERIOR
04027496 WHITE RIVER NEAR SANBORN, WI--CONTINUED

WATER QUALITY DATA, FEBRUARY TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDED ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
JUN , 1976 07...	1615	181	1	1	0	0	0	0	<10	0	<10	0

DATE	SUS- PENDED COBALT (CD) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDED COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAO (PB) (UG/L)	SUS- PENDED LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)
JUN , 1976 07...	0	0	0	0	0	270	30	2	0	2	20

DATE	SUS- PENDED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS- PENDED MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDED SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDED ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
JUN , 1976 07...	10	10	<.5	.0	<.5	0	0	0	10	10	0

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method	
June 7, 1976	1615	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Ankistrodesmus</i>	63	3		
		<i>Chodatella</i>	130	6		
		CHRYSOPHYTA			Grab sample	
		Bacillariophyceae				
		<i>Achnanthes</i>	160	8		
		<i>Cocconeis</i>	130	6		
		<i>Cyclotella</i>	280	15		
		<i>Cymbella</i>	31	2		
		<i>Diatoma</i>	31	2		
		<i>Epithemia</i>	31	2		
		<i>Fragilaria</i>	63	3		
		<i>Gomphonema</i>	220	11		
		<i>Navicula</i>	380	19		
		<i>Nitzschia</i>	440	23		
TOTAL	1,900					
July 20, 1976	1615	CHLOROPHYTA				Grab sample
		Chlorophyceae				
		<i>Ankistrodesmus</i>	12	1		
		<i>Scenedesmus</i>	24	2		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Achnanthes</i>	130	11		
		<i>Cocconeis</i>	140	12		
		<i>Cymbella</i>	12	1		
		<i>Diatoma</i>	60	5		
		<i>Epithemia</i>	60	5		
		<i>Fragilaria</i>	24	2		
		<i>Gomphonema</i>	24	2		
		<i>Hantzschia</i>	12	1		
		<i>Navicula</i>	260	22		
		<i>Nitzschia</i>	170	14		
<i>Pinnularia</i>	12	1				
<i>Rhoicosphenia</i>	60	5				
CYANOPHYTA						
Myxophyceae						
<i>Oscillatoria</i>	220	18				
TOTAL	1,200					

04027496 WHITE RIVER NEAR SANBORN, WI--CONTINUED

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
MAY, 1976						
20...	0945	--	188	6	3.0	--
27...	0830	18.5	172	10	4.6	--
JUN						
07...	1615	24.0	181	9	4.4	100
09...	1615	--	181	14	6.8	--
10...	1638	--	176	12	5.7	--
13...	1300	--	192	21	11	--
15...	1730	--	204	23	13	--
17...	1900	--	188	18	9.1	--
18...	1700	--	181	19	9.3	--
21...	1700	--	181	16	7.8	--
23...	1050	--	181	24	12	--
23...	1800	--	176	19	9.0	--
25...	1700	--	188	22	11	--
26...	1000	--	192	16	8.3	--
29...	1715	--	189	29	15	--
30...	1630	--	188	30	15	--
JUL						
01...	1700	--	189	10	5.1	--
02...	1630	--	188	10	5.1	--
06...	1700	--	168	10	4.5	--
08...	1700	--	168	11	5.0	--
10...	1800	--	168	12	5.4	--
12...	1700	--	158	11	4.7	--
13...	1800	--	154	11	4.6	--
15...	1700	--	154	11	4.6	--
17...	1900	--	158	8	3.4	--
20...	1615	24.0	162	19	8.3	88
20...	1700	--	189	13	6.6	--
21...	1630	--	188	14	7.1	--
23...	1730	--	154	8	3.3	--
25...	1600	--	150	10	4.0	--
26...	1420	--	126	20	6.8	--
26...	1700	--	145	11	4.3	--
28...	1700	--	145	10	3.9	--
29...	1700	--	154	10	4.2	--
31...	0700	--	145	10	3.9	--
AUG						
02...	1700	--	150	8	3.2	--
04...	1700	--	150	8	3.2	--
05...	1730	--	189	17	8.7	--
07...	0700	--	188	22	11	--
10...	1700	--	169	30	14	--
11...	1130	--	188	21	11	--
11...	1700	--	169	32	15	--
13...	1700	--	188	15	7.6	--
14...	1700	--	177	20	9.6	--
16...	1700	--	169	9	4.1	--
18...	1700	--	166	8	3.6	--
21...	1700	--	154	11	4.6	--
25...	1700	--	141	10	3.8	--
27...	1700	--	145	8	3.1	--
29...	1700	--	149	8	3.2	--
31...	1730	--	149	7	2.8	--
SEP						
02...	1700	--	149	8	3.2	--
22...	1000	--	162	2	.87	--

PARTICLE SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED								
			MAT. SIEVE DIAM.								
			% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM	% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM	% FINER THAN 16.0 MM	% FINER THAN 32.0 MM
FEB, 1976											
23...	1050	181	0	4	10	11	12	13	19	35	87

STREAMS TRIBUTARY TO LAKE SUPERIOR

04027500 WHITE RIVER NEAR ASHLAND, WI

LOCATION.--LAT 46°29'50", LONG 90°54'15", IN NE 1/4 SEC.6, T.46 N., R.4 W., ASHLAND COUNTY, HYDROLOGIC UNIT 04010302, AT DOWNSTREAM END OF POWERPLANT OF LAKE SUPERIOR DISTRICT POWER CO., 0.3 MI (0.5 KM) DOWNSTREAM FROM BRIDGE ON STATE HIGHWAY 112 OVER DAM, AND 4.5 MI (7.2 KM) SOUTH OF ASHLAND CITY LIMITS.

DRAINAGE AREA.--279 MI² (723 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--MAY 1948 TO CURRENT YEAR.

REVISED RECORDS.--WRD WIS. 1971: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 660.15 FT (201.214 M) ABOVE MEAN SEA LEVEL (LAKE SUPERIOR DISTRICT POWER CO. BENCH MARK). PRIOR TO MAY 20, 1976, NONRECORDING GAGE AT SAME SITE AND DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR.

AVERAGE DISCHARGE.--28 YEARS, 286 FT³/S (8.100 M³/S), 13.92 IN/YR (354 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 6,270 FT³/S (178 M³/S) JULY 1, 1953, GAGE HEIGHT, 7.90 FT (2.408 M) FROM RATING CURVE EXTENDED ABOVE 3,000 FT³/S (85.0 M³/S); MINIMUM, 3.1 FT³/S (0.089 M³/S) APR. 28-30, 1949, GAGE HEIGHT, 0.09 FT (0.027 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 2,750 FT³/S (77.9 M³/S) MAR. 30, GAGE HEIGHT, 4.36 FT (1.329 M); MAXIMUM GAGE HEIGHT, 4.97 FT (1.515 M) JAN. 11, BACKWATER FROM ICE; MINIMUM DISCHARGE, 52 FT³/S (1.47 M³/S) JULY 21, GAGE HEIGHT, 0.61 FT (0.186 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(SHIFTING-CONTROL METHOD USED MAR. 30 TO APR. 29, AUG. 4-10; STAGE-DISCHARGE
RELATION AFFECTED BY ICE NOV. 27 TO MAR. 22.)

0.9	129	2.0	SAS
1.0	158	3.0	1,270
1.5	343	4.0	2,160

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	167	340	220	210	250	1220	220	271	206	160	155
2	161	167	330	230	210	230	1320	214	244	186	160	151
3	158	167	320	230	210	220	1110	204	228	181	150	149
4	155	167	310	230	210	210	891	201	227	178	176	146
5	150	167	320	220	210	200	864	204	212	176	273	146
6	150	170	320	220	210	200	823	198	201	174	308	145
7	150	173	320	220	210	200	804	185	195	175	234	147
8	150	173	320	220	220	210	804	179	191	177	220	139
9	160	182	310	220	220	210	790	170	187	171	201	140
10	160	214	300	220	230	210	635	170	165	170	188	144
11	160	256	300	210	230	210	548	170	183	167	194	145
12	152	334	290	210	230	210	502	176	181	161	198	144
13	149	325	290	210	240	210	472	176	196	161	185	139
14	155	295	280	210	250	200	406	167	226	161	170	145
15	161	260	270	200	240	200	384	170	211	164	160	154
16	161	249	260	200	240	210	325	170	211	168	162	151
17	161	249	270	200	230	210	303	179	200	170	168	153
18	158	269	260	200	230	210	278	188	236	168	175	157
19	155	361	250	190	230	220	325	191	261	169	181	158
20	158	388	250	190	220	240	330	201	256	158	182	159
21	158	379	240	190	220	300	317	207	211	144	174	162
22	161	339	240	200	220	400	290	227	191	158	167	157
23	161	334	230	200	240	500	260	243	183	161	160	153
24	182	334	230	200	290	607	245	258	180	162	157	151
25	170	339	230	200	300	659	242	270	184	161	161	149
26	167	300	230	200	310	706	242	282	199	169	161	150
27	173	300	230	210	300	732	234	289	197	176	153	155
28	179	300	230	220	280	797	224	289	186	179	152	155
29	173	320	220	220	260	933	220	285	200	189	157	154
30	167	350	230	210	---	1900	231	287	210	187	158	153
31	167	---	220	210	---	1110	---	296	---	166	155	---
TOTAL	4983	8028	8440	6510	6900	12904	15639	6666	6245	5295	5600	4506
MEAN	161	268	272	210	238	416	521	215	208	171	181	150
MAX	182	388	340	230	310	1900	1320	296	271	206	308	162
MIN	149	167	220	190	210	200	220	167	180	144	150	139
CFSM	.58	.96	.97	.75	.85	1.49	1.87	.77	.75	.61	.65	.54
IN.	.66	1.07	1.13	.87	.92	1.72	2.09	.89	.83	.71	.75	.60
CAL YR 1975	TOTAL	85393	MEAN 234	MAX 1380	MIN 100	CFSM .84	IN 11.39					
WTR YR 1976	TOTAL	91716	MEAN 251	MAX 1900	MIN 139	CFSM .90	IN 12.23					

04027500 WHITE RIVER NEAR ASHLAND, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--NOVEMBER 1975 TO SEPTEMBER 1976.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: MAY TO SEPTEMBER 1976.

REMARKS.--SEDIMENT RECORDS ARE GOOD. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR 10 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 1,850 MG/L AUG. 6; MINIMUM DAILY MEAN, 7 MG/L JULY 25. MAXIMUM OBSERVED, 4,300 MG/L AUG. 5; MINIMUM OBSERVED, 4 MG/L MAR. 17.
SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 1,550 TONS (1,410 TONNES) AUG. 6; MINIMUM DAILY, 3.1 TONS (2.8 TONNES) JULY 25.

WATER QUALITY DATA, NOVEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)
JUN , 1976												
07...	1430	188	175	8.2	23.5	7	--	--	89	0	24	7.0
JUL												
20...	1445	64	190	8.2	22.0	10	9.0	107	84	0	23	6.4

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED PHOSPHATE (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)
JUN , 1976											
07...	2.9	7	.1	.9	108	0	89	1.1	2.4	.8	.1
JUL											
20...	2.9	7	.1	.8	106	0	87	1.1	7.7	.6	.1

DATE	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
JUN , 1976											
07...	10	111	101	.15	56.3	.03	.30	.33	1.5	.05	2.9
JUL											
20...	12	106	106	.14	16.3	.01	.55	.56	2.5	.03	--

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUSPENDED CADMIUM (CD) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	SUSPENDED CHROMIUM (CR) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
JUN , 1976												
07...	1430	188	1	1	0	1	0	1	<10	0	<10	0

DATE	SUSPENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUSPENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUSPENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)
JUN , 1976											
07...	0	0	0	0	0	400	20	4	0	4	40

DATE	SUSPENDED MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUSPENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	SUSPENDED SELENIUM (SE) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUSPENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JUN , 1976											
07...	30	10	<.5	.0	<.5	0	0	0	10	10	0

STREAMS TRIBUTARY TO LAKE SUPERIOR
04027500 WHITE RIVER NEAR ASHLAND, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method		
June 7, 1976	1430	CHLOROPHYTA			Grab sample		
		Chlorophyceae					
		<i>Ankistrodesmus</i>	45	2			
		<i>Elakatothrix</i>	45	2			
		<i>Kirchneriella</i>	22	1			
		<i>Scenedesmus</i>	340	13			
		<i>Staurastrum</i>	22	1			
		CHRYSOPHYTA					
		Bacillariophyceae					
		<i>Achnanthes</i>	220	9			
		<i>Amphora</i>	22	1			
		<i>Cocconeis</i>	250	10			
		<i>Cyclotella</i>	540	21			
		<i>Cymbella</i>	22	1			
		<i>Diatoma</i>	22	1			
		<i>Fragilaria</i>	67	3			
		<i>Gomphonema</i>	45	2			
		<i>Melosira</i>	67	3			
		<i>Navicula</i>	110	4			
		<i>Neidium</i>	22	1			
		<i>Nitzschia</i>	490	19			
		<i>Surirella</i>	45	2			
		Chrysophyceae					
		<i>Ochromonas</i>	22	1			
		CYANOPHYTA					
		Myxophyceae					
		<i>Anabaena</i>	130	5			
		<i>Spirulina</i>		0			
		EUGLENOPHYTA					
		Euglenophyceae					
		<i>Euglena</i>		0			
		TOTAL		2,600			
		July 20, 1976	1445	CHLOROPHYTA				Grab sample
Chlorophyceae							
<i>Scenedesmus</i>				0			
CHRYSOPHYTA							
Bacillariophyceae							
<i>Achnanthes</i>	210			15			
<i>Cocconeis</i>	170			12			
<i>Cyclotella</i>	10			1			
<i>Cymbella</i>	10			1			
<i>Diatoma</i>	52			4			
<i>Epithemia</i>	10			1			
<i>Fragilaria</i>	62			5			
<i>Gomphonema</i>	110			8			
<i>Navicula</i>	320			23			
<i>Nitzschia</i>	360			27			
<i>Pinnularia</i>	10			1			
<i>Rhoicosphenia</i>	41			3			
<i>Synedra</i>				0			
TOTAL				1,400			

WATER QUALITY DATA.

Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance	Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance
Nov. 4, 1975	1430	7.0	170	185	June 23, 1976	1000	21.5	193	170
Jan. 21, 1976	1000	0.0	195	170	July 21, 1976	1500	23.0	52.8	180
Feb. 4, 1976	1050	0.0	210	180	July 26, 1976	1700	23.5	201	180
Mar. 17, 1976	1700	1.0	210	180	July 31, 1976	1200	23.0	167	180
Mar. 30, 1976	1500	1.0	2,020	-	Sept. 22, 1976	1200	8.0	157	-
Apr. 28, 1976	1300	6.5	258	170					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDEO SEDI- MENT (MG/L)	SUS- PENDEO SEDI- MENT DIS- CHARGE (T/DAY)	DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDEO SEDI- MENT (MG/L)	SUS- PENDEO SEDI- MENT DIS- CHARGE (T/DAY)
NOV. 1975						APR					
04...	1345	7.0	170	49	22	01...	1630	--	1240	64	214
JAN. 1976						02...	1700	--	1220	56	191
21...	0900	.0	195	9	4.7	03...	1600	--	960	31	81
MAR						04...	1800	--	804	32	69
17...	1610	1.0	210	4	2.3	08...	1600	--	764	214	453
30...	1525	1.0	2020	133	725	09...	0700	--	810	156	341
31...	1630	--	1230	78	259	10...	1700	--	574	236	366
						MAY					
						27...	0905	--	278	19	14

0402T500 WHITE RIVER NEAR ASHLAND, WI--CONTINUED

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE DISE- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS- PENDE SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	
MAR , 1976								
30...	1525	2020	133	725	31	38	45	
31...	1630	1230	78	259	48	54	60	
DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM
MAR , 1976								
30...	54	73	82	86	89	92	100	
31...	69	83	87	90	93	100	--	

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
JUN , 1976												
23...	0940	193	0	1	1	1	2	3	5	10	20	28

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), MAY TO SEPTEMBER 1976

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)										
1			---	---	27	20	13	7.2	342	149	192	80
2			---	---	26	17	13	6.6	381	165	134	55
3			---	---	25	16	13	6.4	489	198	159	64
4			---	---	25	15	12	5.8	942	481	140	55
5			---	---	24	14	12	5.8	1610	1080	132	52
6			---	---	24	13	15	7.0	1850	1550	129	51
7			---	---	23	12	16	7.6	1690	1080	233	92
8			---	---	23	12	16	7.9	1010	608	429	161
9			---	---	22	11	11	5.8	613	328	475	179
10			---	---	22	11	10	4.5	608	310	447	174
11			---	---	21	10	11	4.9	523	272	323	127
12			---	---	21	10	11	4.6	474	250	157	61
13			---	---	20	11	9	4.0	293	148	167	63
14			---	---	20	12	10	4.4	222	103	147	58
15			---	---	19	11	10	4.4	154	67	151	63
16			---	---	19	11	9	3.9	129	57	176	71
17			---	---	18	9.8	11	5.0	144	65	123	50
18			---	---	18	12	10	4.7	218	104	54	23
19			---	---	18	12	9	4.0	180	88	47	20
20			35	9.9	17	12	12	5.8	202	99	40	17
21			34	19	17	9.7	9	4.4	192	90	33	14
22			34	21	16	8.3	8	3.8	194	88	63	27
23			33	22	16	7.9	9	3.8	200	87	53	22
24			32	22	16	7.6	10	4.2	179	76	21	8.4
25			31	23	15	7.4	7	3.1	190	83	25	9.9
26			31	23	15	8.1	9	4.3	180	79	29	12
27			30	23	15	7.8	8	3.9	170	70	38	16
28			29	23	14	7.0	11	5.5	173	71	47	20
29			29	22	14	7.5	23	11	190	81	34	14
30			28	22	14	7.7	51	26	170	72	14	5.9
31			27	22	---	---	267	120	206	86	---	---
MONTH			---	---	---	330.8	---	299.5	---	8085.0	---	1665.2

STREAMS TRIBUTARY TO LAKE SUPERIOR

04031000 BLACK RIVER NEAR BESSEMER, MI

LOCATION.--LAT 46°30'41", LONG 90°04'28", IN NE 1/4 SE 1/4 SEC.32, T.48 N., R.46 W., BOGEBIC COUNTY, HYDROLOGIC UNIT 04020101, ON RIGHT BANK 450 FT (137 M) DOWNSTREAM FROM BRIDGE ON COUNTY HIGHWAY, 500 FT (152 M) DOWNSTREAM FROM POWDER MILL CREEK, AND 2.5 MI (4.0 KM) NORTHWEST OF BESSEMER.

DRAINAGE AREA.--200 MI² (518 KM²).

PERIOD OF RECORD.--OCTOBER 1954 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1911: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 1,154.3 FT (351.83 M) ABOVE MEAN SEA LEVEL (LEVELS BY REGISTERED SURVEYOR).

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD AND THOSE BELOW 15 FT³/S (0.4 M³/S), WHICH ARE FAIR. PRIOR TO 1967, SOME GROUND WATER PUMPED FROM MINES AT BESSEMER. SEVERAL OBSERVATIONS OF WATER TEMPERATURE WERE MADE DURING THE YEAR.

AVERAGE DISCHARGE.--22 YEARS, 237 FT³/S (6.712 M³/S), 16.09 IN/YR (409 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 14,800 FT³/S (419 M³/S) APR. 24, 1960, GAGE HEIGHT, 14.27 FT (4.349 M), FROM FLOODMARK, FROM RATING CURVE EXTENDED ABOVE 5,300 FT³/S (150 M³/S) ON BASIS OF SLOPE-AREA MEASUREMENT OF PEAK FLOW; MINIMUM DAILY, 6.8 FT³/S (0.19 M³/S) SEPT. 25, 1976; MINIMUM GAGE HEIGHT OBSERVED, 0.38 FT (0.116 M) AUG. 24, 1976.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 1,500 FT³/S (42.5 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)	DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)
MAR. 30	0700	2,070 58.6	5.86 1.786	APR. 15	0500	*3,310 93.7	*7.66 2.335
APR. 9	2300	2,510 71.1	6.56 1.999				

MINIMUM DAILY DISCHARGE, 6.8 FT³/S (0.19 M³/S) SEPT. 25; MINIMUM GAGE HEIGHT OBSERVED, 0.38 FT (0.116 M) AUG. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	141	330	90	74	90	1450	329	67	101	15	8.0
2	58	125	330	90	74	88	1390	356	60	76	15	8.6
3	55	108	330	92	74	86	1480	377	54	59	15	8.6
4	51	95	300	92	74	86	1400	368	47	49	17	8.0
5	51	83	270	90	76	86	1540	326	44	41	24	8.0
6	46	76	240	86	76	86	1830	275	40	37	20	8.6
7	47	79	220	84	76	84	2020	239	37	35	17	8.0
8	45	143	200	82	74	84	1970	213	36	32	16	8.0
9	43	147	190	82	74	82	2070	189	35	36	15	8.0
10	43	849	180	82	76	82	2400	170	33	35	17	7.6
11	42	1230	170	82	78	82	1950	140	31	31	17	7.6
12	41	1110	170	80	80	82	1660	128	29	28	16	7.6
13	41	914	170	80	80	82	1680	112	36	27	15	7.6
14	40	701	170	80	82	82	2340	108	33	26	14	10
15	42	565	170	80	84	84	3170	97	140	26	12	8.0
16	45	486	180	80	88	84	2660	132	250	28	11	8.0
17	43	499	180	80	90	96	2310	184	213	25	10	8.0
18	42	494	190	80	92	170	1870	157	582	23	9.6	8.6
19	42	1010	180	78	92	270	1630	136	754	22	8.8	9.8
20	41	1220	170	76	92	420	1210	120	541	28	8.2	10
21	40	840	150	76	90	840	933	103	379	27	7.8	9.2
22	38	700	140	78	90	800	1100	88	261	24	7.6	8.6
23	44	600	130	80	90	800	904	77	182	24	7.4	7.6
24	216	500	120	78	90	820	709	70	132	21	7.2	7.2
25	514	450	115	74	92	860	565	64	104	20	7.2	6.8
26	380	400	110	74	92	920	458	59	82	20	7.2	8.0
27	306	370	100	76	92	1000	390	53	64	20	8.2	9.2
28	263	340	98	78	92	1150	336	48	52	18	8.2	7.6
29	220	320	96	76	90	1400	279	46	136	17	8.0	7.2
30	186	300	94	74	---	1980	261	55	146	17	8.0	7.6
31	165	---	92	74	---	1660	---	67	---	16	8.0	---
TOTAL	3286	14895	5585	2504	2424	14536	43965	4886	4600	989	377.4	245.6
MEAN	106	497	180	80.8	83.6	469	1466	158	153	31.9	12.2	8.19
MAX	514	1230	330	92	92	1980	3170	377	754	101	24	10
MIN	38	76	92	74	74	82	261	46	29	16	7.2	6.8
CFSM	.53	2.49	.90	.40	.42	2.35	7.33	.79	.77	.16	.06	.04
IN.	.61	2.77	1.04	.47	.45	2.70	8.18	.91	.86	.18	.07	.05

CAL YR 1975 TOTAL 85964.0 MEAN 236 MAX 3340 MIN 13 CFSM 1.18 IN 15.99
WTR YR 1976 TOTAL 98293.0 MEAN 269 MAX 3170 MIN 6.8 CFSM 1.35 IN 18.28

04031500 PRESQUE ISLE RIVER AT MARENISCO, MI

LOCATION.--LAT 46°22'20", LONG 89°41'32", IN SE 1/4 NW 1/4 SEC.21, T.46 N., R.43 W., GOGEBIC COUNTY, HYDROLOGIC UNIT 04020101, ON LEFT BANK 0.3 MI (0.5 KM) UPSTREAM FROM HIGHWAY BRIDGE IN MARENISCO, AND 1.5 MI (2.4 KM) DOWNSTREAM FROM CONFLUENCE OF EAST AND WEST BRANCHES.

DRAINAGE AREA.--171 MI² (443 KM²).

PERIOD OF RECORD.--FEBRUARY 1945 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1707: 1954. WSP 1911: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 1,489.30 FT (453.939 M) ABOVE MEAN SEA LEVEL (LEVELS BY MICHIGAN DEPARTMENT OF NATURAL RESOURCES). PRIOR TO MAY 27, 1949, NONRECORDING GAGE AT SITE 0.3 MI (0.5 KM) DOWNSTREAM AT DIFFERENT DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR. OCCASIONAL REGULATION FOR LAKE OR POND LEVEL CONTROL AT SEVERAL LOCATIONS IN THE HEADWATERS. SINCE 1959, OCCASIONAL REGULATION BY PRESQUE ISLE FLOODING RESERVOIR, USABLE CAPACITY, ABOUT 3,000 ACRE-FT (3.7 MM³), 2.5 MI (4.0 KM) UPSTREAM. SEVERAL OBSERVATIONS OF WATER TEMPERATURE WERE MADE DURING THE YEAR.

AVERAGE DISCHARGE.--31 YEARS, 178 FT³/S (5.041 M³/S), 14.14 IN/YR (359 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 3,520 FT³/S (99.7 M³/S) APR. 25, 1960, GAGE HEIGHT, 11.25 FT (3.429 M); MINIMUM OBSERVED, 13 FT³/S (0.37 M³/S) SEPT. 30, 1948, GAGE HEIGHT, 2.25 FT (0.686 M), SITE AND DATUM THEN IN USE.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 1,140 FT³/S (32.3 M³/S) APR. 16, GAGE HEIGHT, 7.51 FT (2.289 M); MINIMUM, 10 FT³/S (0.51 M³/S) SEPT. 12, 13, GAGE HEIGHT, 3.06 FT (0.933 M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	80	400	120	100	120	816	294	128	110	34	24
2	50	77	420	120	100	115	818	326	114	105	32	31
3	46	70	370	115	100	115	809	392	103	95	31	25
4	45	65	350	115	100	115	818	422	92	86	31	21
5	45	60	320	115	100	115	640	380	63	78	36	20
6	43	59	300	110	100	115	837	328	78	71	36	20
7	42	58	270	110	100	115	635	294	74	68	33	20
8	41	66	250	110	100	115	853	282	70	65	30	20
9	41	68	220	110	100	115	884	271	70	62	28	20
10	41	325	200	110	105	115	961	262	69	61	28	19
11	40	515	190	110	105	115	973	179	71	58	30	19
12	42	525	180	110	110	115	923	100	74	54	30	18
13	42	457	170	110	110	115	873	122	91	52	26	19
14	42	389	200	110	110	115	891	142	85	51	27	22
15	41	330	220	110	110	115	1020	150	150	52	26	24
16	42	297	230	110	110	115	1110	159	201	58	25	24
17	39	277	220	110	110	115	1120	257	186	56	25	25
18	34	263	210	110	110	120	1060	284	220	53	24	22
19	33	288	190	110	110	140	995	215	274	50	25	22
20	33	321	160	110	110	170	889	80	244	59	24	23
21	33	300	170	110	110	230	768	95	203	61	24	24
22	32	270	160	110	110	290	724	106	168	56	23	24
23	55	247	155	110	110	280	728	110	137	52	23	24
24	110	226	150	110	110	280	676	110	119	49	22	23
25	176	210	145	110	110	310	514	110	115	45	22	22
26	169	200	140	105	115	350	356	107	105	42	22	23
27	149	190	135	105	115	400	468	100	90	39	25	23
28	126	180	130	105	120	470	428	92	94	36	22	24
29	106	196	125	105	120	554	392	90	110	37	22	23
30	94	309	125	100	---	665	324	116	123	37	21	23
31	87	---	120	100	---	766	---	134	---	36	24	---
TOTAL	1968	6910	6645	3405	3120	6985	23703	6109	3749	1634	833	671
MEAN	63.5	231	214	110	108	225	790	197	125	59.2	26.9	22.4
MAX	176	525	420	120	120	766	1120	422	274	110	36	31
MIN	32	58	120	100	100	115	324	80	69	36	21	18
CFSM	.37	1.35	1.25	.64	.63	1.32	4.62	1.15	.73	.35	.16	.13
IN.	.43	1.50	1.45	.74	.68	1.52	5.16	1.33	.82	.40	.18	.15
CAL YR 1975	TOTAL	62357	MEAN 171	MAX 1370	MIN 31	CFSM 1.00	IN 13.57					
WTR YR 1976	TOTAL	65940	MEAN 180	MAX 1120	MIN 18	CFSM 1.05	IN 14.34					

STREAMS TRIBUTARY TO LAKE SUPERIOR

04037500 CISCO BRANCH ONTONAGON RIVER AT CISCO LAKE OUTLET, MI

LOCATION.--LAT 46°15'12"N, LONG 89°27'05"W, IN NE 1/4 SEC.32, T.45 N., R.41 W., GOGEBIC COUNTY, HYDROLOGIC UNIT 04020102, ON LEFT BANK 80 FT (24 M) DOWNSTREAM FROM CISCO LAKE DAM, 2.5 MI (4.0 KM) UPSTREAM FROM LANGFORD CREEK, 5.0 MI (8.0 KM) UPSTREAM FROM U.S. HIGHWAY 2, AND 13 MI (21 KM) WEST OF WATERSMEET.

DRAINAGE AREA.--50.7 MI² (131.3 KM²).

PERIOD OF RECORD.--OCTOBER 1944 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1911: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 1,672.69 FT (509.836 M) ABOVE MEAN SEA LEVEL. PRIOR TO OCTOBER 1, 1966, NONRECORDING GAGE AT SAME SITE AND DATUM 4.00 FT (1.219 M) HIGHER.

REMARKS.--RECORDS GOOD EXCEPT THOSE BELOW 25 FT³/S (0.71 M³/S), WHICH ARE FAIR. FLOW COMPLETELY REGULATED BY CISCO LAKE, USABLE CAPACITY, 15,600 ACRE-FT (19.2 MM³). SEVERAL OBSERVATIONS OF WATER TEMPERATURE WERE MADE DURING THE YEAR.

AVERAGE DISCHARGE.--32 YEARS, 47.1 FT³/S (1.334 M³/S), 12.62 IN/YR (321 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 268 FT³/S (8.16 M³/S) MAY 1-4, 1951, GAGE HEIGHT, 6.10 FT (1.859 M), PRESENT DATUM; MINIMUM DAILY, 0.13 FT³/S (0.004 M³/S) AUG. 4-7, AUG. 22 TO SEPT. 5, 1970.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 146 FT³/S (4.19 M³/S) OCT. 25, GAGE HEIGHT, 5.42 FT (1.652 M); MINIMUM DAILY, 0.19 FT³/S (0.005 M³/S) AUG. 28, SEPT. 3, 4, 6-9; MINIMUM GAGE HEIGHT, 3.86 FT (1.177 M) AUG. 28, SEPT. 2-9, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	113	94	34	38	36	100	12	15	1.2	.40	.22
2	.70	110	93	36	38	38	101	12	24	1.3	.37	.22
3	.70	104	92	36	39	38	101	13	17	1.3	.25	.19
4	.70	103	91	37	40	38	101	13	19	.85	.28	.19
5	.85	100	89	37	39	40	102	13	27	1.2	.28	.22
6	.70	95	76	45	40	62	102	19	27	1.2	.28	.19
7	.70	93	67	52	40	82	103	24	26	1.2	.31	.19
8	.70	91	66	53	40	80	103	24	25	1.3	.31	.19
9	.70	89	65	52	39	78	105	23	25	1.6	.28	.19
10	.70	100	65	52	40	62	107	22	24	1.4	.25	.22
11	.55	103	56	53	41	51	109	22	25	1.3	.28	.22
12	.85	104	49	53	40	52	109	22	26	1.3	.28	.22
13	.23	105	49	51	40	53	110	20	26	1.4	.31	.22
14	.53	106	54	51	40	52	106	19	25	1.2	.31	.22
15	.57	104	63	51	40	52	93	18	26	1.2	.31	.25
16	.65	102	71	51	40	51	92	16	25	1.2	.31	.25
17	.81	100	70	51	47	51	77	20	26	1.2	.28	.25
18	.66	98	68	51	58	51	98	22	25	1.0	.25	.25
19	.84	96	68	51	58	51	105	22	26	.85	.25	.25
20	.61	96	67	51	57	52	103	30	26	.85	.22	.25
21	.78	98	66	51	56	53	55	38	12	.70	.22	.25
22	.76	100	65	51	56	54	18	38	1.9	.70	.22	.25
23	.98	98	48	52	56	54	19	37	1.8	.55	.25	.25
24	124	98	35	52	56	55	19	22	1.6	.70	.22	.22
25	138	95	35	53	55	69	19	12	1.4	.70	.22	.25
26	140	93	35	52	55	81	19	5.9	1.3	.55	.22	.25
27	132	90	35	52	55	81	16	1.2	.85	.70	.22	.25
28	126	89	35	41	44	81	12	.70	.85	.40	.19	.22
29	122	89	35	37	37	84	12	.37	1.0	.37	.22	.25
30	122	93	35	38	---	92	12	1.2	.91	.37	.22	.25
31	119	---	34	38	---	100	---	1.4	---	.37	.22	---
TOTAL	1813.55	2955	1871	1465	1324	1874	2228	543.77	508.61	30.16	8.23	6.84
MEAN	58.5	98.5	60.4	47.3	45.7	60.5	74.3	17.5	17.0	.97	.27	.23
MAX	140	113	94	53	58	100	110	38	27	1.6	.40	.25
MIN	.55	89	34	34	37	36	12	.37	.85	.37	.19	.19
CFSM	1.15	1.94	1.19	.93	.90	1.19	1.47	.35	.34	.02	.005	.004
IN.	1.33	2.17	1.37	1.07	.97	1.37	1.63	.40	.37	.02	.006	.005
CAL YR 1975	TOTAL	16249.66	MEAN	44.5	MAX	140	MIN	.36	CFSM	.88	IN	11.92
WTR YR 1976	TOTAL	14628.16	MEAN	40.0	MAX	140	MIN	.19	CFSM	.79	IN	10.73

04061000 BRULE RIVER NEAR FLORENCE, WI

LOCATION.--LAT 45°57'31", LONG 88°15'57", IN SE 1/4 SE 1/4 SEC.11, T.41 N., R.32 W., MICHIGAN MERIDIAN, IRON COUNTY, HYDROLOGIC UNIT 04030108, ON LEFT BANK 40 FT (12 M) UPSTREAM FROM HIGHWAY BRIDGE, 1.0 MI (1.6 KM) UPSTREAM FROM PAINT RIVER, 2.5 MI (4.0 KM) NORTH OF FLORENCE, AND 5.0 MI (8.0 KM) UPSTREAM FROM CONFLUENCE WITH MICHIGAN RIVER.

DRAINAGE AREA.--389 MI² (1,008 KM²).

PERIOD OF RECORD.--JANUARY 1914 TO FEBRUARY 1916, JUNE 1944 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1367: 1914-16. WSP 1911: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 1,200.55 FT (365.928 M) ABOVE MEAN SEA LEVEL (LEVELS BY OWEN AYRES ASSOCIATES). PRIOR TO AUG. 29, 1944, NONRECORDING GAGE AT BRIDGE 40 FT (12 M) DOWNSTREAM AT SAME DATUM.

REMARKS.--RECORDS 6000 EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR. DISCHARGE INCLUDES SOME MINE PUMPAGE (SEE STA 04060500). SEVERAL OBSERVATIONS OF WATER TEMPERATURE WERE MADE DURING THE YEAR.

AVERAGE DISCHARGE.--33 YEARS, (1914-15, 1944-76), 361 FT³/S (10.22 M³/S), 12.60 IN/YR (320 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 4,700 FT³/S (133 M³/S) JULY 2, 1953, GAGE HEIGHT, 6.57 FT (2.003 M); MAXIMUM GAGE HEIGHT, 8.27 FT (2.521 M) DEC. 26, 1969 (BACKWATER FROM ICE); MINIMUM DISCHARGE, 118 FT³/S (3.34 M³/S) DEC. 2, 1963 (DISCHARGE MEASUREMENT); MINIMUM GAGE HEIGHT, 1.79 FT (0.546 M) JULY 24, 1964.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 1,260 FT³/S (35.7 M³/S) APR. 11, GAGE HEIGHT, 3.65 FT (1.113 M); MAXIMUM GAGE HEIGHT, 6.45 FT (1.966 M) DEC. 12 (BACKWATER FROM ICE); MINIMUM DISCHARGE, 185 FT³/S (5.24 M³/S) SEPT. 12, 13, GAGE HEIGHT, 1.69 FT (0.516 M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	256	254	450	300	280	320	957	504	584	300	247	230
2	253	261	440	300	280	310	837	545	433	277	234	220
3	248	252	430	300	280	310	880	636	368	267	225	217
4	246	244	410	300	280	310	888	595	362	259	225	209
5	244	241	380	290	280	300	910	580	346	250	302	211
6	243	242	370	290	280	300	1020	543	332	245	269	212
7	237	247	350	280	280	300	1130	493	327	249	271	212
8	233	260	330	280	280	290	1210	453	324	246	249	217
9	232	287	320	280	290	290	1220	429	326	242	234	209
10	234	533	310	280	290	290	1230	407	325	247	242	196
11	234	663	300	290	290	290	1240	395	356	264	245	191
12	235	610	290	290	280	290	1110	385	347	252	239	188
13	244	558	310	290	280	290	990	375	402	241	234	188
14	242	448	400	290	290	300	952	387	380	238	230	198
15	238	398	440	290	300	310	1020	381	337	234	227	207
16	234	367	400	290	310	320	1070	656	326	235	220	207
17	233	348	380	280	310	340	1050	754	318	234	213	205
18	229	338	350	280	310	350	1120	598	315	237	207	205
19	229	343	320	280	310	360	1170	495	345	233	211	222
20	227	358	310	280	300	370	1050	451	324	273	223	216
21	230	373	310	280	300	450	921	420	299	279	207	225
22	230	349	310	280	300	560	1030	405	285	265	201	218
23	253	351	310	270	300	650	1000	403	277	249	200	212
24	308	330	310	270	300	690	872	394	275	235	198	209
25	384	310	310	270	310	700	746	377	276	229	195	209
26	358	300	300	280	320	720	650	363	273	227	197	211
27	310	310	290	280	330	740	585	349	265	226	203	217
28	286	330	290	280	330	750	542	335	267	223	194	221
29	271	400	290	280	330	762	507	337	303	223	203	227
30	261	450	290	280	---	805	488	488	339	223	209	244
31	255	---	300	280	---	1030	---	562	---	267	205	---
TOTAL	7917	10755	10600	8810	8620	14097	28395	14495	9976	7669	6979	6353
MEAN	255	359	342	284	297	455	947	468	333	247	225	212
MAX	384	663	450	300	330	1030	1240	754	504	300	302	244
MIN	227	241	290	270	280	290	488	335	265	223	194	188
CFSM	.66	.92	.88	.73	.76	1.17	2.43	1.20	.86	.63	.58	.54
IN.	.76	1.03	1.01	.84	.82	1.35	2.72	1.39	.95	.73	.67	.61
CAL YR 1975	TOTAL	133031	MEAN 364	MAX 2280	MIN 193	CFSM .94	IN 12.72					
WTR YR 1976	TOTAL	134666	MEAN 368	MAX 1240	MIN 188	CFSM .95	IN 12.88					

STREAMS TRIBUTARY TO LAKE MICHIGAN

04063000 MEMONINEE RIVER NEAR FLORENCE, WI

LOCATION.--LAT 45°57'04", LONG 88°11'13", IN NE 1/4 SEC.16, T.41 N., R.31 W., MICHIGAN MERIDIAN, IRON COUNTY, HYDROLOGIC UNIT 0403010A, ON LEFT BANK 0.5 MI (0.8 KM) DOWNSTREAM FROM CONFLUENCE OF BRULE AND MICHIGAMME RIVERS, 3.5 MI (5.6 KM) NORTHEAST OF FLORENCE, AND AT MILE 117 (188 KM).

DRAINAGE AREA.--1,780 MI² (4,610 KM²).

PERIOD OF RECORD.--JANUARY 1914 TO CURRENT YEAR. PUBLISHED AS "AT TWIN FALLS NEAR IRON MOUNTAIN, MICH." 1914-57. RECORDS PUBLISHED FOR BOTH SITES JULY 1950 TO SEPTEMBER 1957.

REVISED RECORDS.--WSP 1707: 1953(M). WSP 1911: DRAINAGE AREA OF FORMER SITE.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 1,119.23 (341.141 M) ABOVE MEAN SEA LEVEL (LEVELS BY OWEN AYRES ASSOCIATES). PRIOR TO JULY 1950, HEADWATER AND TAILWATER GAGES AND GENERATION DATA ENTERED HOURLY IN DAILY LOG SHEETS BY COMPANY EMPLOYEES AT THE TWIN FALLS POWERPLANT OF WISCONSIN-MICHIGAN POWER CO., 10.4 MI (16.7 KM) DOWNSTREAM.

REMARKS.--RECORDS EXCELLENT. PRIOR TO JULY 1950 DISCHARGE DETERMINED FROM POWERPLANT RECORDS COMPUTED ON BASIS OF LOAD-DISCHARGE RATING OF HYDROELECTRIC UNITS AND RATING FOR TAILWATER GAGE DURING PERIODS OF SPILL. RATING DEVELOPED BY GEOLOGICAL SURVEY. FLOW REGULATED BY POWERPLANTS, AND BY MICHIGAMME RESERVOIR, CAPACITY, 119,950 ACRE-FT (148 HM³), AND PEAVY POND, CAPACITY, 33,860 ACRE-FT (41.7 HM³), ON MICHIGAMME RIVER, AND BY MANY SMALLER RESERVOIRS ABOVE STATION. SEVERAL OBSERVATIONS OF WATER TEMPERATURE WERE MADE DURING THE YEAR.

AVERAGE DISCHARGE.--62 YEARS, 1,802 FT³/S (51.03 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 19,500 FT³/S (552 M³/S) APR. 26, 1960, GAGE HEIGHT, 14.15 FT (4.313 M); MINIMUM, 38 FT³/S (1.08 M³/S) AUG. 21, 1962, SEPT. 26, 1975; MINIMUM GAGE HEIGHT, 1.18 FT (0.360 M) AUG. 21, 1962, NOV. 4, 1965; MINIMUM DAILY DISCHARGE, 57 FT³/S (1.61 M³/S) SEPT. 26, 1975.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 10,500 FT³/S (297 M³/S) APR. 22, GAGE HEIGHT, 9.83 FT (2.996 M); MINIMUM, 67 FT³/S (1.90 M³/S) OCT. 20, GAGE HEIGHT, 1.35 FT (0.411 M); MINIMUM DAILY, 96 FT³/S (2.72 M³/S) OCT. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1370	1430	1910	1910	1870	1740	2650	2760	1720	1150	762	860
2	1500	1550	1970	1960	1820	1920	2660	2970	2150	1100	857	800
3	1550	1460	1960	1940	1810	1950	2420	3900	1520	879	914	735
4	1680	1490	1920	1910	1910	1870	2270	3780	1550	777	911	726
5	1680	1360	1870	1820	1990	1790	3200	3210	1580	687	914	762
6	1530	1150	1930	1790	1880	1510	3760	3390	1440	1140	916	779
7	1310	1160	1890	2060	1850	1610	3940	3180	1690	1040	723	923
8	1260	1140	1900	1870	1690	1960	4180	3170	1650	1170	626	711
9	1480	945	2000	1890	1790	2070	4150	3170	1780	1200	964	769
10	1160	1240	2100	1920	1810	1960	4490	3120	1600	764	1000	914
11	1100	1590	2110	1740	1950	1860	4740	2730	1600	706	887	732
12	677	1860	1990	1920	2000	1960	4750	2590	1630	1120	901	736
13	1060	1950	1970	1840	1820	1690	4720	1650	1690	1050	991	962
14	1020	2130	2110	1890	1980	1590	4650	1550	1710	1090	733	865
15	1100	1960	1920	1840	1810	1610	4670	2020	1710	983	654	743
16	1200	2160	2030	1870	1880	1510	5430	3190	1710	936	882	778
17	1480	2130	2110	1930	1930	1400	5550	3860	1720	682	894	856
18	640	1880	2060	1940	2090	1720	6590	3260	1600	749	849	741
19	96	1930	1940	1890	2090	1850	7550	3110	1220	906	862	724
20	108	1950	2200	1910	2100	1920	8450	2740	1360	1090	871	768
21	238	2130	2250	1760	2050	2170	8900	2390	1560	1030	665	835
22	148	1640	2040	1830	2010	2150	9780	2220	1330	1350	749	945
23	212	1560	2200	1620	1970	2090	9970	2150	1530	962	913	700
24	500	1810	2090	1710	1900	2490	8200	1720	1500	618	919	1080
25	680	1520	1880	1740	2010	3080	6260	1340	1230	702	839	708
26	520	1450	2020	1670	1670	2550	4490	1380	1010	933	913	716
27	450	883	1870	1820	1810	3000	4790	1040	784	1030	810	864
28	400	1300	1830	1910	1490	2420	4690	1380	1250	1010	805	952
29	450	1400	1930	1810	1440	2630	3840	1020	1280	998	660	921
30	1000	1690	2060	1710	---	2460	2760	1550	1180	840	832	880
31	1390	---	1960	1680	---	2760	---	1840	---	746	900	---
TOTAL	28989	47888	62040	57700	54620	63290	154500	77580	45484	29438	26136	24427
MEAN	935	1596	2001	1861	1883	2042	5150	2503	1516	950	843	814
MAX	1680	2160	2250	2060	2100	3080	9970	3900	2150	1350	1000	1080
MIN	96	883	1830	1710	1440	1400	2270	1020	784	618	626	700
CFSM	.53	.90	1.12	1.05	1.06	1.15	2.89	1.41	.85	.53	.47	.46
IN.	.61	1.00	1.30	1.21	1.14	1.32	3.23	1.62	.95	.62	.55	.51
CAL YR 1975 TOTAL	669932		MEAN 1835	MAX 8130	MIN 57	CFSM 1.03	IN 14.00					
WTR YR 1976 TOTAL	672092		MEAN 1836	MAX 9970	MIN 96	CFSM 1.03	IN 14.05					

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04063700 POPPLE RIVER NEAR FENCE, WI
(HYDROLOGIC BENCHMARK STATION)

LOCATION.--LAT 45°45'49", LONG 88°27'47", IN NW 1/4 SEC.23, T.38 N., R.16 E., FLORENCE COUNTY, HYDROLOGIC UNIT 04030108, ON LEFT BANK 20 FT (6 M) UPSTREAM FROM BRIDGE ON U. S. FOREST SERVICE ROAD 2159, 1.8 MI (2.9 KM) DOWNSTREAM FROM MUO CREEK, 2.6 MI (4.2 KM) NORTHWEST OF FENCE, AND 11.5 MI (18.5 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--131 MI² (339 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--OCTOBER 1963 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 1,406.16 FT (428.598 M) ABOVE MEAN SEA LEVEL. PRIOR TO JUNE 18, 1964, NONRECORDING GAGE AT SAME SITE AND DATUM.

REMARKS.--RECORDS 6000 EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR.

AVERAGE DISCHARGE.--13 YEARS, 123 FT³/S (3.483 M³/S) 12.75 IN/YR (324 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 1,310 FT³/S (37.1 M³/S), REVISED, MAY 2, 1972, GAGE HEIGHT, 4.14 FT (1.262 M); MINIMUM, 15 FT³/S (0.42 M³/S) JULY 19, 23, 24, 1964, GAGE HEIGHT, 1.04 FT (0.317 M).

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 300 FT³/S (8.50 M³/S) AND MAXIMUM (#):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)	DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)
APR. 22	0300	*786 22.3	*3.41 1.039	MAY 18	0400	540 15.3	2.98 0.908

MINIMUM DISCHARGE, 16 FT³/S (0.439 M³/S) AUG. 26, 26.

REVISIONS.--THE MAXIMUM DISCHARGE FOR THE WATER YEAR 1972 HAS BEEN REVISED TO 1,310 FT³/S (37.1 M³/S) MAY 2, 1972, GAGE HEIGHT, 4.14 FT (1.262 M) SUPERSEDING FIGURE PUBLISHED IN THE REPORT FOR 1972.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(SHIFTING-CONTROL METHOD USED OCT. 1 TO NOV. 6; STAGE-DISCHARGE RELATION
AFFECTED BY ICE NOV. 21-26, DEC. 6-7, DEC. 15 TO FEB. 22.)

0.9	12	2.4	295
1.2	30	3.0	550
1.5	65	4.0	1,200
1.9	145		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	65	147	60	50	60	316	263	227	68	29	22
2	37	60	150	60	50	60	382	260	206	56	26	24
3	35	66	135	60	50	62	410	274	173	46	25	23
4	35	63	122	56	50	63	410	274	142	44	25	22
5	34	54	120	54	49	66	423	270	120	38	48	22
6	33	48	120	54	49	65	460	267	104	35	53	20
7	32	47	110	62	49	63	491	251	90	34	45	19
8	31	65	100	60	52	63	520	230	82	33	38	20
9	31	74	92	58	52	63	540	203	78	32	34	20
10	34	140	88	54	54	65	565	182	74	32	32	20
11	34	197	82	54	52	63	585	160	72	34	36	19
12	39	221	77	56	52	65	565	142	68	33	39	19
13	38	233	75	56	56	68	535	132	74	30	40	18
14	41	206	132	54	58	68	505	137	84	28	38	21
15	41	185	130	52	54	66	505	132	84	27	34	25
16	40	165	120	52	54	66	515	366	78	28	29	23
17	39	150	120	48	54	65	530	505	72	28	27	22
18	38	135	110	44	54	65	636	525	69	27	25	21
19	36	127	98	46	52	69	726	459	69	26	26	21
20	35	125	92	47	54	120	750	382	65	38	25	22
21	35	120	86	46	58	185	750	312	59	39	23	22
22	34	120	80	48	56	185	780	263	53	36	22	22
23	42	110	78	48	56	162	750	218	49	30	22	23
24	56	100	76	49	56	170	690	176	47	28	19	25
25	78	96	72	50	60	191	595	145	46	27	19	24
26	100	88	70	50	65	203	515	130	45	25	20	25
27	182	86	68	49	66	224	446	118	43	25	22	25
28	96	80	66	48	65	230	386	108	41	25	20	26
29	86	84	64	47	63	281	330	108	47	26	19	25
30	77	135	62	49	---	330	291	155	69	26	20	26
31	69	---	60	49	---	334	---	209	---	29	20	---
TOTAL	1496	3445	3002	1622	1590	3840	15902	7356	2530	1035	900	666
MEAN	48.3	115	96.8	52.3	54.8	124	530	237	84.3	33.4	29.0	22.2
MAX	102	233	150	62	66	334	780	525	227	68	53	26
MIN	31	47	60	44	49	60	291	108	41	25	19	18
CFSM	.37	.88	.74	.40	.42	.95	4.05	1.81	.64	.25	.22	.17
IN.	.42	.98	.85	.46	.45	1.09	4.52	2.09	.72	.29	.26	.19
CAL YR 1975	TOTAL	36031	MEAN	98.7	MAX	1010	MIN	22	CFSM	.75	IN	10.23
WTR YR 1976	TOTAL	43384	MEAN	119	MAX	780	MIN	18	CFSM	.91	IN	12.32

STREAMS TRIBUTARY TO LAKE MICHIGAN

04063700 POPPLE RIVER NEAR FENCE, WI--CONTINUED
(HYDROLOGIC BENCH-MARK STATION)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--JUNE 1964 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: JUNE 1964 TO CURRENT YEAR.

INSTRUMENTATION.--TEMPERATURE RECORDER SINCE JUNE 1, 1964.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: MAXIMUM, 29.0°C JULY 1, 2, 1970; MINIMUM, 0.0°C ON MANY DAYS DURING WINTER PERIOD.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: MAXIMUM, 26.0°C JUNE 11, 14, 15; MINIMUM, 0.0°C ON MANY DAYS DURING WINTER PERIOD.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISE- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UMITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	HARD- NESS (CA+MG) (MG/L)
OCT , 1975											
16...	1400	39	210	7.8	8.0	10.6	94	50	811	812	110
NOV											
13...	1100	240	130	7.3	1.5	13.2	99	210	814	82	64
DEC											
16...	1330	110	160	6.9	.0	11.2	81	44	89	47	68
JAN , 1976											
16...	1300	52	215	6.9	.0	11.3	81	24	86	86	120
FEB											
12...	1400	52	520	7.0	.0	17.2	124	20	84	81	110
MAR											
09...	1330	65	230	7.4	.0	12.4	89	44	82	81	110
APR											
14...	1145	505	<50	7.5	7.0	11.4	96	120	83	83	32
MAY											
12...	1145	148	100	6.7	11.5	9.9	95	46	88	89	58
JUN											
09...	1100	78	160	7.6	20.0	9.0	103	852	46	823	84
JUL											
22...	1120	34	220	7.9	21.0	8.2	95	--	30	47	110
AUG											
11...	1030	36	240	7.7	19.0	7.4	83	--	45	100	120
SEP											
14...	1200	22	280	7.7	17.0	7.2	77	160	58	53	130

DATE	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (MA) (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
OCT , 1975											
16...	13	25	12	1.7	3	.1	1.1	120	0	98	3.0
NOV											
13...	23	14	7.0	1.2	4	.1	.9	50	0	41	4.0
DEC											
18...	14	14	8.0	1.5	5	.1	.6	66	0	54	13
JAN , 1976											
16...	13	23	15	1.2	2	.0	.9	129	0	106	26
FEB											
12...	4	24	13	1.6	3	.1	.7	134	0	110	21
MAR											
09...	8	23	13	1.7	3	.1	.7	126	0	103	8.0
APR											
14...	12	6.5	3.8	1.0	6	.1	.8	24	0	20	1.2
MAY											
12...	10	12	6.8	.9	3	.1	.4	58	0	48	19
JUN											
09...	11	18	9.5	1.0	3	.0	.7	89	0	73	3.6
JUL											
22...	4	24	13	1.4	3	.1	.8	133	0	109	2.7
AUG											
11...	9	25	14	1.7	3	.1	.7	135	0	111	4.3
SEP											
14...	7	28	14	1.4	2	.1	.9	147	0	121	4.7

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

STREAMS TRIBUTARY TO LAKE MICHIGAN
04063700 POPPLE RIVER NEAR FENCE, WI--CONTINUED

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WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER OAY)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT , 1975										
16...	7.7	1.2	.2	10	130	118	.18	13.7	.01	.01
NOV										
13...	15	2.6	.4	10	113	76	.15	73.2	.36	.04
DEC										
18...	12	2.2	.3	13	113	84	.15	33.6	.29	.03
JAN , 1976										
16...	9.8	2.6	.1	14	137	130	.19	19.2	.18	.03
FEB										
12...	9.5	1.0	.1	14	139	130	.19	19.5	.21	.03
MAR										
09...	9.9	2.3	.2	14	131	127	.16	23.0	.26	.03
APR										
14...	8.6	1.4	.1	6.1	68	40	.09	92.7	.04	.03
MAY										
12...	6.6	1.9	.1	4.2	88	62	.12	35.2	.05	.03
JUN										
09...	6.2	1.0	.1	6.8	115	87	.16	24.2	--	--
JUL										
22...	11	.1	.1	8.4	135	124	.19	12.4	.00	.03
AUG										
11...	5.8	2.1	.1	7.3	122	123	.17	11.9	.03	.02
SEP										
14...	3.8	1.1	.1	8.4	145	130	.20	8.61	.01	.04

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)
OCT , 1975							
16...	1400	39	1	1100	0	<10	0
APR , 1976							
14...	1145	505	0	0	0	10	0

DATE	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT , 1975							
16...	180	0	30	<.5	0	0	30
APR , 1976							
14...	440	1	40	<.5	0	0	10

RADIOCHEMICAL ANALYSES

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDEO GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)	SUS-PENDEO GROSS BETA AS CS-137 (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDEO GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED RA-226 (RADDN METHOD) (PC/L)	DIS-SOLVED URANIUM (U) (UG/L)
OCT , 1975										
16...	1400	39	2.6	<.4	3.0	<.4	2.4	<.4	.01	.60

STREAMS TRIBUTARY TO LAKE MICHIGAN
04063700 POPPLE RIVER NEAR FENCE, WI--CONTINUED

PESTICIDE ANALYSES

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	CYANIDE (CN) (MG/L)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLDR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)
OCT , 1975 16...	1400	39	.00	.0	0	.00	.0	.0	0	.00

DATE	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)
OCT , 1975 16...	.0	.00	.0	.00	.0	.00	.00	.0	.00

DATE	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	TOTAL HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)
OCT , 1975 16...	.0	.00	.00	.0	.00	.0	.00	.0	.00

DATE	TOTAL METHYL PARA-THION (UG/L)	TOTAL METHYL TRI-THION (UG/L)	TOTAL PARA-THION (UG/L)	TOTAL TOX-APHENE (UG/L)	TOX-APHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
OCT , 1975 16...	.00	.00	.00	0	0	.00	.00	.00	.00

WATER QUALITY DATA

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 4, 1975	1430	6.5	60.1	100	May 26, 1976	1800	20.0	122	-
Jan. 5, 1976	1300	0.0	53.5	120	June 25, 1976	1355	19.5	45.2	100
Feb. 25, 1976	1545	0.0	63.3	120	Aug. 3, 1976	1730	19.0	21.9	280
Apr. 6, 1976	1700	3.5	464	-	Sept. 25, 1976	1130	8.5	25.5	250

04063700 POPPLE RIVER NEAR FENCE, WI--CONTINUED

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE D SEDI- MENT CHARGE (MG/L)	SUS- PENDE D SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT , 1975						
16...	1400	8.0	39	1	.11	--
NOV						
13...	1100	1.5	240	9	5.8	--
DEC						
18...	1330	.0	110	2	.59	0
23...	1600	--	65	1	.18	--
JAN , 1976						
05...	1320	--	54	1	.15	--
16...	1300	.0	52	1	.14	100
28...	0940	--	48	1	.13	--
FEB						
12...	1400	.0	52	5	.70	25
25...	1545	.0	63	8	1.4	--
MAR						
09...	1330	.0	65	1	.18	--
19...	0935	--	66	16	2.9	--
22...	1835	--	185	20	10	--
23...	1835	--	160	10	4.3	--
24...	1730	--	170	52	24	--
27...	1315	--	225	7	4.3	--
30...	1440	--	338	18	16	--
APR						
01...	1045	--	312	6	5.1	--
03...	0730	--	500	8	11	--
04...	1105	--	378	42	43	--
05...	1745	--	464	12	15	--
06...	1655	3.5	464	15	19	--
06...	1755	--	490	31	41	--
07...	1755	--	530	105	150	--
08...	1645	--	550	3	4.5	--
09...	1710	--	570	5	7.7	--
10...	0930	--	600	6	9.7	--
10...	1620	--	612	8	13	--
11...	1715	--	612	7	12	--
12...	1725	--	590	280	446	--
13...	1645	--	560	7	11	--
14...	1145	7.0	505	1	1.4	--
14...	1705	--	530	8	11	--
18...	1000	--	648	9	16	--
19...	1845	--	720	6	12	--
20...	1720	--	756	18	37	--
22...	1755	--	780	5	11	--
27...	1905	--	455	2	2.5	--
MAY						
04...	1805	--	295	2	1.6	--
11...	0935	--	170	2	.92	--
12...	1145	11.5	148	1	.40	--
17...	1515	--	446	119	143	--
18...	1501	--	540	26	38	--
25...	1750	--	155	22	9.2	--
JUN						
06...	1435	--	112	1	.30	--
09...	1100	20.0	78	1	.21	--
14...	1125	--	90	96	23	--
20...	1650	--	66	2	.36	--
25...	1025	--	48	3	.39	--
JUL						
03...	1105	--	50	7	.94	--
11...	1915	--	36	18	1.7	--
22...	1120	21.0	34	5	.46	67
31...	1135	--	31	8	.67	--
AUG						
03...	1735	--	22	10	.59	--
07...	1735	--	45	1	.12	--
11...	1030	19.0	36	5	.49	40
14...	1040	--	38	3	.31	--
22...	1525	--	22	4	.24	--
SEP						
06...	1428	--	23	23	1.4	--
12...	1515	--	18	5	.24	--
14...	1200	17.0	22	4	.24	9
20...	1640	--	21	1	.06	--
25...	1150	--	24	3	.19	--
26...	1100	--	24	4	.26	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JUL , 1976											
22...	1120	34	0	1	3	21	38	47	56	70	95

STREAMS TRIBUTARY TO LAKE MICHIGAN

04063700 POPPLE RIVER NEAR FENCE, WI--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.5	8.0	6.0	---	---	0.0	0.0	---	---	0.0	0.0
2	10.5	6.5	6.0	5.5	---	---	0.0	0.0	---	---	0.0	0.0
3	11.0	8.0	---	---	---	---	0.0	0.0	---	---	0.0	0.0
4	11.5	9.5	---	---	---	---	0.0	0.0	---	---	0.0	0.0
5	11.5	10.5	7.0	5.5	---	---	0.0	0.0	---	---	0.0	0.0
6	11.5	10.0	9.0	6.5	---	---	0.0	0.0	---	---	0.0	0.0
7	11.5	10.0	9.5	9.0	---	---	0.0	0.0	---	---	0.0	0.0
8	11.5	10.5	9.5	9.0	---	---	0.0	0.0	---	---	0.0	0.0
9	11.0	10.5	9.0	7.0	---	---	---	---	---	---	0.0	0.0
10	11.0	10.0	7.0	5.5	---	---	---	---	---	---	0.0	0.0
11	10.0	9.5	5.5	4.0	---	---	---	---	---	---	0.0	0.0
12	10.0	9.0	4.0	3.5	---	---	---	---	---	---	0.0	0.0
13	12.0	9.5	3.5	1.5	---	---	---	---	---	---	0.0	0.0
14	12.0	10.5	1.5	0.5	---	---	---	---	---	---	0.0	0.0
15	11.0	9.0	1.0	0.5	---	---	---	---	---	---	0.0	0.0
16	9.0	8.0	1.5	0.5	---	---	0.0	0.0	---	---	0.0	0.0
17	6.0	6.0	2.0	1.5	---	---	---	---	---	---	0.0	0.0
18	7.0	5.0	3.0	2.0	0.0	0.0	---	---	---	---	0.0	0.0
19	6.0	4.5	5.0	3.0	0.0	0.0	---	---	---	---	0.0	0.0
20	6.0	5.0	3.0	1.5	0.0	0.0	---	---	---	---	0.0	0.0
21	6.0	5.0	1.5	0.5	0.0	0.0	---	---	---	---	0.0	0.0
22	6.5	6.0	0.5	0.0	0.0	0.0	---	---	---	---	0.0	0.0
23	9.5	6.5	0.0	0.0	0.0	0.0	---	---	---	---	0.0	0.0
24	10.5	9.5	0.0	0.0	0.0	0.0	---	---	---	---	0.0	0.0
25	---	---	0.0	0.0	0.0	0.0	---	---	0.0	0.0	0.0	0.0
26	---	---	0.0	0.0	0.0	0.0	---	---	0.0	0.0	0.0	0.0
27	9.0	6.0	0.0	0.0	0.0	0.0	---	---	0.0	0.0	0.0	0.0
28	9.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	6.0	6.0	---	---	0.0	0.0	---	---	0.0	0.0	0.0	0.0
30	6.0	5.5	---	---	0.0	0.0	---	---	---	---	0.0	0.0
31	6.5	5.5	---	---	0.0	0.0	---	---	---	---	---	---
MONTH	12.0	4.5	9.5	0.0	---	---	---	---	---	---	0.0	0.0

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	9.5	8.0	17.0	13.5	21.0	16.0	19.5	16.0	15.5	13.0
2	---	---	9.0	7.0	19.0	15.0	20.5	16.0	19.0	14.5	15.0	11.0
3	---	---	7.0	5.5	20.0	16.5	22.5	16.0	---	---	16.0	11.5
4	---	---	9.5	5.0	21.5	17.0	24.0	19.0	19.0	16.0	15.5	13.5
5	---	---	9.5	6.0	23.5	18.0	24.5	20.5	16.0	15.5	15.0	11.0
6	3.5	3.0	9.5	6.0	24.0	19.0	24.5	21.5	17.0	13.5	17.5	13.5
7	4.0	1.0	9.5	8.0	24.0	19.5	25.5	22.0	18.5	14.0	19.5	15.5
8	4.5	2.0	11.0	8.0	23.5	20.0	25.5	21.5	20.0	16.0	20.5	16.0
9	5.5	3.0	14.5	9.5	24.0	19.5	24.5	21.5	21.0	16.0	19.5	16.0
10	5.5	4.0	15.5	13.0	24.5	20.5	24.5	22.0	21.0	19.0	16.0	13.0
11	5.0	3.0	15.5	12.0	26.0	21.5	25.5	23.0	21.5	18.0	16.5	13.0
12	5.5	3.0	16.0	11.0	25.5	21.0	23.5	20.0	22.5	20.0	17.5	14.0
13	7.0	4.5	15.0	13.5	25.0	20.0	23.0	19.5	22.5	19.0	17.5	15.5
14	9.0	6.5	18.0	12.0	26.0	21.5	25.0	21.0	19.0	16.5	17.5	15.5
15	10.0	9.0	18.5	15.0	26.0	21.5	24.5	21.0	18.0	14.5	15.5	13.5
16	13.0	10.0	17.0	13.0	21.5	18.5	21.5	19.0	18.0	14.5	15.0	11.0
17	13.5	12.0	14.0	11.0	21.0	16.5	21.0	18.0	19.0	15.0	15.5	11.5
18	13.5	12.0	15.0	11.5	21.0	18.0	23.5	19.0	21.0	17.5	16.0	12.5
19	12.0	10.0	16.0	12.0	19.5	15.5	23.5	21.5	23.5	20.0	15.5	13.5
20	11.5	9.5	19.0	15.0	21.5	18.5	24.0	21.5	24.0	21.0	13.5	10.5
21	10.5	9.0	18.5	16.0	23.5	18.5	24.0	20.0	23.0	20.0	11.0	10.0
22	9.0	8.0	18.5	15.5	24.0	19.5	24.0	20.0	22.5	20.5	10.5	8.0
23	8.5	8.0	17.0	15.0	24.0	20.0	25.0	21.0	21.0	18.5	9.5	6.5
24	8.5	8.0	17.0	14.5	22.0	19.5	24.0	21.0	21.5	18.0	9.0	6.0
25	9.0	6.5	19.0	14.5	20.0	18.0	23.5	20.0	21.0	18.5	9.0	6.5
26	8.5	7.0	20.0	19.0	22.0	18.0	23.5	21.0	20.5	19.0	9.5	8.0
27	8.5	6.5	20.5	16.0	24.0	20.0	23.0	20.0	22.0	19.0	9.0	8.0
28	10.0	6.5	19.5	16.5	23.5	20.0	23.0	20.0	21.0	17.5	10.0	6.5
29	10.0	8.5	19.0	15.5	23.5	18.5	22.0	18.0	17.5	13.5	9.0	8.0
30	9.5	8.5	15.5	14.5	20.5	17.5	21.5	20.0	17.5	13.5	11.0	9.0
31	---	---	14.5	14.0	---	---	20.0	18.0	16.5	14.5	---	---
MONTH	13.5	1.0	20.5	5.0	26.0	13.5	25.5	18.0	24.0	13.5	20.5	6.0

STREAMS TRIBUTARY TO LAKE MICHIGAN

04066000 MENOMINEE RIVER NEAR PEMBINE, WI

LOCATION.--LAT 45°35'56", LONG 87°46'32", IN SEC.16, T.37 N., R.28 W., MICHIGAN MERIDIAN, MENOMINEE COUNTY, MICH., HYDROLOGIC UNIT 04030108, ON LEFT BANK 0.6 MI (1.0 KM) UPSTREAM FROM PEMENE CREEK, 4.0 MI (6.4 KM) WEST OF NATHAN, MICH., 15 MI (24 KM) SOUTHEAST OF PEMBINE, AND AT MILE 65.8 (105.9 KM).

DRAINAGE AREA.--3,240 MI² (8,390 KM²), APPROXIMATELY.

PERIOD OF RECORD.--OCTOBER 1949 TO CURRENT YEAR. MONTHLY DISCHARGE ONLY FOR SOME PERIODS, PUBLISHED IN WSP 1307.

REVISED RECORDS.--WSP 1277: 1952.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 770 FT (235 M), FROM RIVER-PROFILE MAP. PRIOR TO OCT. 28, 1972, AT SITE 0.5 MI (0.8 KM) DOWNSTREAM AT DATUM 15 FT (4.6 M) LOWER.

REMARKS.--RECORDS 6000 EXCEPT FOR WINTER MONTHS, WHICH ARE FAIR. FLOW REGULATED BY POWERPLANTS AND BY MICHIGANME RESERVOIR, CAPACITY, 119,950 ACRE-FT (148 HM³), AND PEAVY POND, CAPACITY, 33,860 ACRE-FT (41.7 HM³), ON THE MICHIGANME RIVER, AND BY MANY SMALLER RESERVOIRS ABOVE STATION.

AVERAGE DISCHARGE.--27 YEARS, 3,004 FT³/S (85.07 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 26,900 FT³/S (762 M³/S) MAY 6, 1960, GAGE HEIGHT, 13.90 FT (4.237 M); MINIMUM, 694 FT³/S (19.7 M³/S) SEPT. 3, 1969, GAGE HEIGHT, 1.66 FT (0.506 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 15,700 FT³/S (445 M³/S) APR. 23, GAGE HEIGHT, 14.75 FT (4.496 M); MINIMUM DAILY, 864 FT³/S (25.0 M³/S) SEPT. 7.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 21, 22, NOV. 30 TO MAR. 29.)

6.8	900	11.0	7,000
7.5	1,460	13.0	11,340
9.0	3,440	15.0	16,400

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	983	1790	2500	2500	2300	2400	7580	5000	5440	1930	1100	1800
2	1070	1990	2800	2400	2300	2300	6960	5000	4870	1610	1100	990
3	1910	2010	2900	2300	2300	2300	7000	5520	4020	1950	1400	990
4	1920	2050	2800	2800	2300	2300	7020	6920	3620	1480	1210	960
5	2070	1930	2800	3000	2400	2400	6940	5560	3380	1070	1380	966
6	2140	1920	2800	2700	2500	2500	8020	5560	3120	924	1370	960
7	2200	1530	2900	2400	2500	2600	8480	5440	2940	1530	1410	884
8	1580	1480	2600	2500	2400	2400	8570	5360	3000	1750	982	1030
9	1590	1420	2600	2400	2400	2400	8420	5060	2920	1510	1180	1100
10	1950	1570	2700	2400	2400	2400	8400	5040	2730	1230	1220	984
11	1490	2450	2700	2500	2400	2500	9320	4330	2970	1020	1300	984
12	1160	3080	2500	2600	2400	2600	9030	4060	3140	1070	1420	978
13	1380	3460	2500	2600	2500	2600	8730	3830	2980	1200	1380	978
14	1410	3210	2700	2500	2400	2500	8420	3020	3030	1380	1330	990
15	1360	3470	3100	2500	2400	2500	8290	3100	3100	1430	1140	984
16	1580	3210	3100	2400	2500	2400	8660	5300	2790	1440	1080	984
17	1420	3120	3100	2400	2500	2300	10000	10000	2790	1160	1090	1120
18	1910	2770	3400	2500	2500	2300	10500	9010	2700	990	996	990
19	1500	2550	3600	2500	2500	2300	12800	8000	2390	1140	996	990
20	930	2630	3100	2400	2500	2400	13600	6460	1970	1200	1180	990
21	912	1900	2900	2400	2600	2500	14000	5900	2250	1200	1070	984
22	966	2000	2800	2400	2700	3800	14800	5340	2310	1410	1050	984
23	972	2250	2800	2400	2800	3600	15500	4420	2150	1300	972	964
24	954	1920	2800	2400	2500	3400	14900	3540	2110	1200	1060	1010
25	918	1830	2800	2400	2500	4000	11800	3320	1840	1000	1120	1080
26	985	2090	2600	2400	2600	4900	8900	3040	1750	1000	1090	1110
27	1340	2280	2600	2400	2700	5000	7360	2800	1290	1100	1070	1040
28	1710	1580	2900	2400	2600	5000	7670	2670	1350	1000	1020	996
29	1610	1650	2800	2400	2500	5000	6780	2170	1600	1100	972	996
30	1630	2200	2700	2300	---	6240	5600	2580	1970	1300	1020	1220
31	1800	---	2600	2300	---	7180	---	4380	---	1300	1050	---
TOTAL	45350	67340	87400	76500	71900	99020	284070	151730	82520	40124	35598	30256
MEAN	1463	2245	2819	2468	2479	3194	9469	4895	2751	1294	1148	1009
MAX	2200	3470	3600	3000	2800	7180	15500	10000	5440	1950	1420	1220
MIN	912	1420	2500	2300	2300	2300	5600	2170	1290	924	972	884
CAL YR 1975	TOTAL	1059110	MEAN	2902	MAX	16400	MIN	912				
WTR YR 1976	TOTAL	1071808	MEAN	2928	MAX	15500	MIN	864				

STREAMS TRIBUTARY TO LAKE MICHIGAN

04067000 MENOMINEE RIVER BELOW KOSS, MI

LOCATION.--LAT 45°21'16", LONG 87°38'55", IN SEC.9, T.34 N., R.27 W., MICHIGAN MERIDIAN, MENOMINEE COUNTY, HYDROLOGIC UNIT 04030108, ON LEFT BANK AT POWERPLANT OF WISCONSIN PUBLIC SERVICE CORP., 0.5 MI (0.8 KM) UPSTREAM FROM LITTLE CEDAR RIVER, 3.6 MI (5.8 KM) SOUTHEAST OF KOSS, AND AT MILE 24.7 (39.7 KM).

DRAINAGE AREA.--3,790 MI² (9,820 KM²), APPROXIMATELY.

PERIOD OF RECORD.--JULY 1907 TO MARCH 1909 (PUBLISHED AS "AT KOSS"), JULY 1913 TO CURRENT YEAR.

GAGE.--HEADWATER AND TAILWATER GAGES AND GENERATION DATA ENTERED HOURLY IN DAILY LOG SHEET BY COMPANY EMPLOYEES, PRIOR TO JUNE 1913, CHAIN GAGE ON RAILROAD BRIDGE 4 MI (6.4 KM) UPSTREAM.

REMARKS.--RECORDS FAIR. DAILY DISCHARGE COMPUTED ON BASIS OF AVERAGE DAILY LOAD AND LOAD-DISCHARGE RATING OF COMBINED HYDROELECTRIC UNITS. FLOW REGULATED BY POWERPLANTS, AND BY MICHIGAMME RESERVOIR, CAPACITY, 119,950 ACRE-FT (148 HM³), AND PEAVY POND, CAPACITY, 33,860 ACRE-FT (41.7 HM³) ON MICHIGAMME RIVER, AND BY MANY SMALLER RESERVOIRS ABOVE STATION.

COOPERATION.--RECORDS OF DAILY DISCHARGE FURNISHED BY WISCONSIN PUBLIC SERVICE CORP. SINCE 1913.

AVERAGE DISCHARGE.--64 YEARS (WATER YEARS 1907-08, 1913-76), 3,153 FT³/S (89.29 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DAILY DISCHARGE, 33,000 FT³/S (935 M³/S) MAY 10, 1960; MINIMUM DAILY, 162 FT³/S (4.59 M³/S) SEPT. 15, 1931.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DAILY DISCHARGE, 15,800 FT³/S (447 M³/S) APR. 24; MINIMUM DAILY, 711 FT³/S (20.1 M³/S) SEPT. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1160	1680	2740	2930	2260	2210	9600	5350	5440	1900	1500	1250
2	1200	2090	2890	2760	2320	2300	6980	5460	5440	2040	1160	1140
3	1070	2490	2770	2590	2160	2250	8330	4990	4160	1900	1440	1060
4	1620	2540	2400	2600	2300	2500	6930	7030	3570	1890	1100	1180
5	2020	1900	3520	2160	2350	2690	7600	7440	3790	1720	1450	960
6	2560	1900	3630	2210	2300	2700	9100	5310	3210	1200	1760	960
7	1900	1980	3080	2400	2350	2400	9770	5520	3120	1480	1590	1180
8	2060	1740	2660	2120	2300	2300	9890	5250	2750	1340	1610	1000
9	1440	1680	2720	2310	2300	2400	9890	5370	2750	1320	1180	960
10	1350	1900	2820	2560	2300	2500	9700	5090	2850	1660	1390	1200
11	1480	2040	2700	2400	2350	2690	9860	4780	2710	1340	1440	1170
12	1690	2390	2850	2500	2500	2690	9840	4420	2860	1180	1610	940
13	1540	3550	2950	2360	2400	2500	9890	4210	2880	1180	1490	950
14	1330	3500	3120	2440	2210	2560	9700	3480	3120	1240	1710	1100
15	1340	3560	4040	2400	2390	2380	9480	3150	2880	1460	1380	1100
16	1340	3360	4180	2300	2460	2300	9380	3970	2950	1490	1320	1060
17	1720	3000	4010	2400	2400	2210	9650	8190	2380	1940	1400	1180
18	1510	2880	3580	2360	2450	2240	9890	10900	2820	1380	1220	1380
19	1450	2690	3510	2320	2600	2420	11900	9580	2500	1060	1100	1010
20	1570	2640	3240	2300	2660	2290	13200	8570	2220	1200	1120	711
21	1460	2760	3390	2300	2690	3360	14800	6960	2140	1560	1120	1030
22	1300	2880	3020	2430	2780	3610	15300	4930	2270	1400	1250	1040
23	1420	3000	3000	2330	2440	3440	15400	5170	2350	1700	1200	931
24	1390	2370	2880	2380	2450	3750	15800	3470	1950	1870	1080	998
25	1340	2180	2770	2350	2710	4030	12600	3480	2200	1300	960	1010
26	1300	1730	2810	2200	2690	4480	12700	3120	1970	1100	1200	1030
27	1290	2080	2810	2340	2700	6090	10200	3000	1570	1200	1150	1310
28	1490	2020	2590	2400	2600	6230	8350	2930	1300	1200	1250	1010
29	1870	2100	2500	2300	2350	6290	7950	2640	1830	1100	1100	1060
30	1850	2690	2480	2210	---	7390	7650	2690	1800	1290	980	1180
31	1450	---	2810	2210	---	8820	---	4090	---	1480	1100	---
TOTAL	47530	73320	94470	73870	70790	106020	315530	160540	83800	45120	40360	32090
MEAN	1533	2444	3047	2363	2441	3420	10520	5179	2793	1455	1303	1070
MAX	2560	3560	4180	2930	2780	8820	15800	10900	5440	2040	1760	1380
MIN	1070	1680	2400	2120	2160	2210	7650	2640	1300	1060	960	711
CAL YR 1975	TOTAL	1158210	MEAN	3173	MAX	16500	MIN	1070				
WTR YR 1976	TOTAL	1143460	MEAN	3124	MAX	15800	MIN	711				

STREAMS TRIBUTARY TO LAKE MICHIGAN

04069500 PESHTIGO RIVER AT PESHTIGO, WI

LOCATION.--LAT 45°02'49", LONG 87°44'40", IN NE 1/4 SEC.30, T.30 N., R.23 E., MARINETTE COUNTY, HYDROLOGIC UNIT 04030105, ON LEFT BANK 75 FT (23 M) DOWNSTREAM FROM CHICAGO AND NORTHWESTERN RAILWAY BRIDGE, 0.5 MI (0.8 KM) DOWNSTREAM FROM WISCONSIN PUBLIC SERVICE CORP. POWERPLANT AT PESHTIGO, AND 11.5 MI (18.5 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--1,120 MI² (2,901 KM²), REVISED.

PERIOD OF RECORD.--JUNE 1953 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 584.64 FT (178.198 M) ABOVE MEAN SEA LEVEL.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR. DIURNAL FLUCTUATION CAUSED BY TWO POWERPLANTS UPSTREAM.

AVERAGE DISCHARGE.--23 YEARS, 930 FT³/S (26.34 M³/S), 11.24 IN/YR (285 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 9,790 FT³/S (277 M³/S) MAY 9, 1960, GAGE HEIGHT, 11.59 FT (3.533 M), FROM RATING CURVE EXTENDED ABOVE 5,000 FT³/S (142 M³/S) ON BASIS OF COMPUTATION OF PEAK FLOW THROUGH DAM GATES; MINIMUM, 17 FT³/S (0.48 M³/S) NOV. 29, 1966, GAGE HEIGHT, 1.00 FT (0.305 M); MINIMUM DAILY, 84 FT³/S (2.38 M³/S) AUG. 5, 1957.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 6,380 FT³/S (181 M³/S) MAR. 27, GAGE HEIGHT, 9.92 FT (3.024 M); MINIMUM DAILY, 186 FT³/S (5.27 M³/S) SEPT. 19.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND)
(STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 14 TO FEB. 5.)

1.5	170	3.5	1,000
1.9	292	5.0	1,990
2.5	515	7.0	3,590
		10.0	6,480

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	611	540	1110	580	780	684	5630	1300	1760	556	387	375
2	574	390	754	500	700	1520	4950	1380	1610	501	284	348
3	478	480	821	540	740	1040	4540	1450	1500	367	357	267
4	360	580	821	580	840	876	4200	1350	1130	329	336	322
5	535	460	1190	500	780	793	3890	1430	959	374	406	329
6	415	420	1260	490	769	841	3640	1750	830	401	454	292
7	454	390	768	500	782	771	3470	1670	744	451	591	288
8	434	330	619	580	732	654	3350	1430	794	367	556	354
9	535	330	853	680	640	731	3160	1270	685	339	400	362
10	490	480	1080	740	707	914	3120	1080	714	397	391	303
11	486	660	770	700	772	982	3090	1070	714	325	741	407
12	433	960	652	640	756	1090	2880	1090	729	229	521	363
13	337	960	675	660	771	1230	2850	997	560	378	481	343
14	460	880	740	720	779	1190	2690	912	615	322	528	606
15	437	840	1100	680	735	1260	2520	865	671	420	429	402
16	545	860	1000	640	755	1260	2420	1530	522	276	424	322
17	508	820	940	680	782	1270	2260	2780	459	282	397	280
18	506	760	1000	580	885	1070	2340	3410	517	229	410	215
19	435	624	980	620	852	1080	2370	4020	552	251	416	186
20	431	709	920	660	831	1280	2570	3980	459	393	414	211
21	467	1070	860	760	818	1540	3690	3330	428	451	384	194
22	431	1190	800	720	744	1920	4330	2620	552	443	310	194
23	427	908	740	700	651	1630	4340	1430	588	393	285	263
24	507	836	660	740	629	2120	4090	1190	513	346	301	274
25	507	827	600	720	688	3458	3550	1030	476	349	333	294
26	427	489	560	660	751	4990	2970	1060	447	295	293	276
27	467	517	620	640	839	5840	2420	923	374	374	360	202
28	537	608	640	720	710	5720	1950	749	447	325	290	320
29	533	661	520	840	560	5070	1620	944	471	322	279	346
30	520	1230	560	820	---	4960	1670	1320	412	372	229	293
31	520	---	620	780	---	5830	---	1700	---	384	281	---
TOTAL	14807	20809	25233	20370	21778	63606	96570	51060	21232	11241	12268	9231
MEAN	478	694	814	657	751	2052	3219	1647	708	363	396	308
MAX	611	1230	1260	840	885	5840	5630	4020	1760	556	741	606
MIN	337	330	520	490	560	654	1620	749	374	229	229	186
CFSM	.43	.62	.73	.59	.67	1.83	2.87	1.47	.63	.32	.35	.28
IN.	.49	.69	.84	.68	.72	2.11	3.21	1.70	.71	.37	.41	.31
CAL YR 1975	TOTAL	354114	MEAN	970	MAX	5040	MIN	289	CFSM	.87	IN	11.76
WTR YR 1976	TOTAL	368205	MEAN	1006	MAX	5840	MIN	186	CFSM	.90	IN	12.23

04071000 OCONTO RIVER NEAR GILLETT, WI

LOCATION.--LAT 44°51'53", LONG 88°18'00", IN NW 1/4 SEC.34, T.28 N., R.18 E., OCONTO COUNTY, HYDROLOGIC UNIT 04030104, ON LEFT BANK 300 FT (91 M) UPSTREAM FROM COUNTY TRUNK HIGHWAY RB BRIDGE, 2.0 MI (3.2 KM) UPSTREAM FROM CHTISTY BROOK, 2.0 MI (3.2 KM) SOUTH OF GILLETT, AND AT MILE 29 (47 M).

DRAINAGE AREA.--678 MI² (1,756 KM²)

PERIOD OF RECORD.--JUNE 1906 TO MARCH 1909, OCTOBER 1913 TO CURRENT YEAR. MONTHLY DISCHARGE ONLY FOR SOME PERIODS, PUBLISHED IN WSP 1307.

REVISED RECORDS.--WSP 384: DRAINAGE AREA. WSP 1207: 1922. WSP 1307: 1907-8(M), 1914-16(M), 1918-21(M), 1923-33(M), 1937-38(M), 1943(M).

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 732.87 FT (223.379 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN DEPARTMENT OF TRANSPORTATION). SEE WSP 1727 FOR HISTORY OF CHANGES PRIOR TO AUG. 25, 1938.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

AVERAGE DISCHARGE.--65 YEARS (WATER YEARS 1906-08, 1913-76), 582 FT³/S (16.48 M³/S), 11.66 IN/YR (296 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 8,400 FT³/S (238 M³/S) APR. 10, 1922, GAGE HEIGHT, 11.2 FT (3.41 M) FROM FLOODMARKS; CAUSED BY A FAILURE OF DAM AT PULCIFER 4 MI (6.4 KM) ABOVE STATION; MINIMUM, 93 FT³/S (2.63 M³/S) NOV. 26, 1941, GAGE HEIGHT, 0.13 FT (0.040 M), FLOW RETARDED BY ANCHOR ICE ABOVE STATION.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 1,500 FT³/S (42.5 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)		GAGE HEIGHT (FT) (M)		DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)		GAGE HEIGHT (FT) (M)	
MAR. 27	1:300	2,500	70.8	(A)*7.56	2.304	APR. 23	0900	2,050	58.1	3.99	1.216
APR. 1	1600	*2,820	79.9	5.02	1.530	MAY 19	2000	1,570	44.5	3.30	1.006

A ICE JAM

MINIMUM DISCHARGE, 180 FT³/S (5.10 M³/S) AUG. 28-29, GAGE HEIGHT, 0.48 FT (0.146 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 19 TO MAR. 28.)

OCT. 1 TO MAR. 28

0.6	220
1.1	360

MAR. 29 TO SEPT. 30

0.4	160	4.0	2,060
1.1	360	6.0	3,610
2.0	780		

NOTE.--SAME AS FOLLOWING TABLE ABOVE 1.1 FT.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	402	358	560	470	340	490	2780	1000	700	339	297	228
2	383	351	800	470	350	500	2690	1010	700	339	291	261
3	372	342	1200	470	360	520	2450	988	675	327	282	270
4	369	341	1150	470	360	540	2320	904	630	318	273	255
5	356	341	1100	460	360	540	2210	850	590	309	276	249
6	353	342	1000	460	360	520	2080	860	555	300	294	279
7	351	344	940	450	360	520	1960	875	520	291	309	252
8	348	350	860	440	360	520	1860	898	495	285	297	240
9	346	356	800	430	370	520	1770	875	471	282	285	206
10	344	391	740	420	370	500	1700	820	453	279	285	203
11	344	457	700	410	380	500	1640	775	431	276	297	246
12	353	535	760	410	380	500	1580	720	415	267	303	234
13	364	497	820	410	380	520	1500	675	403	261	315	219
14	373	491	860	410	390	540	1390	650	395	258	300	201
15	394	472	900	400	390	560	1290	645	384	252	288	206
16	418	441	880	400	400	560	1240	845	370	252	282	222
17	391	397	840	400	410	580	1220	982	367	249	276	234
18	379	395	780	400	420	580	1220	1190	367	249	279	231
19	370	410	740	390	420	580	1240	1490	363	246	303	228
20	358	430	700	380	430	640	1360	1500	360	273	279	225
21	359	440	660	370	440	1000	1730	1320	354	300	267	225
22	360	430	640	360	440	1500	1970	1140	345	309	249	231
23	357	420	620	360	450	1900	2030	988	339	294	240	228
24	360	400	600	360	460	2100	1950	875	333	285	234	225
25	367	380	580	360	460	2200	1790	795	336	273	231	225
26	369	370	560	350	470	2300	1600	745	336	264	208	225
27	367	450	540	350	470	2500	1420	705	330	261	188	228
28	366	500	520	350	470	2100	1280	640	294	258	185	228
29	358	470	500	340	480	1860	1140	615	294	255	182	234
30	356	430	490	340	---	2240	1040	630	330	261	190	240
31	358	---	480	340	---	2550	---	665	---	288	205	---
TOTAL	11345	12331	23320	12430	11730	32980	51450	27670	12935	8700	8190	6978
MEAN	366	411	752	401	404	1064	1715	893	431	281	264	233
MAX	418	535	1200	470	480	2550	2780	1500	700	339	315	279
MIN	344	341	480	340	340	490	1040	615	294	246	182	201
CFSM	.54	.61	1.11	.59	.60	1.57	2.53	1.32	.64	.41	.39	.34
IN.	.62	.68	1.28	.68	.64	1.81	2.82	1.52	.71	.48	.45	.38

CAL YR 1975 TOTAL 210716 MEAN 577 MAX 2380 MIN 240 CFSM .85 IN 11.56
WTR YR 1976 TOTAL 220059 MEAN 601 MAX 2780 MIN 182 CFSM .89 IN 12.07

STREAMS TRIBUTARY TO LAKE MICHIGAN

04071858 PENSANKEE RIVER NEAR PENSANKEE, WI

LOCATION---LAT 44°49'08", LONG 87°57'12", IN NW 1/4 NE 1/4 SEC.16, T.27 N., R.21 E., OCONTO COUNTY, HYDROLOGIC UNIT 04030103, ON RIGHT BANK 300 FT (90 M) DOWNSTREAM FROM BRIDGE ON TOWN ROAD, 2.8 MI (4.5 KM) DOWNSTREAM FROM BROOKSIDE CREEK, 2.6 MI (4.2 KM) WEST OF PENSANKEE, 3.5 MI (5.6 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA---137 MI² (355 KM²).

PERIOD OF RECORD---OCTOBER 1972 TO CURRENT YEAR.

GAGE---WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 600 FT (182.88 M), FROM TOPOGRAPHIC MAP.

REMARKS---RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR.

EXTREMES FOR PERIOD OF RECORD---MAXIMUM DISCHARGE, 3,880 FT³/S (110 M³/S) MAY 29, 1973, GAGE HEIGHT, 12.97 FT (3.953 M); MAXIMUM GAGE HEIGHT, 13.03 FT (3.972 M) MAR. 25, 1976 (BACKWATER FROM ICE); MINIMUM DISCHARGE, 1.4 FT³/S (0.040 M³/S) SEPT. 15, 16, 1976.

EXTREMES FOR CURRENT YEAR---PEAK DISCHARGES ABOVE BASE OF 800 FT³/S (23 M³/S) AND MAXIMUM (#):

DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)	DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)
MAR. 25	0900	ICE JAM		*13.03	3.972	MAR. 31	1300	1,690	47.9	9.10	2.774
MAR. 27	2006	*2,320	65.7	10.45	3.185						

MINIMUM, 1.4 FT³/S (0.040 M³/S) SEPT. 15, 16, GAGE HEIGHT, 2.17 FT (0.661 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 24-27, DEC. 1 TO MAR. 26.)

OCT. 1 TO MAR. 26				MAR. 27 TO SEPT. 30			
2.2	2.2	4.0	244	2.1	0	4.0	210
2.4	16	6.0	700	2.3	5.8	6.0	610
3.0	82	8.0	1,270	2.5	24	8.0	1,250
		10.0	1,870	3.0	78	10.0	2,100

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	31	450	27	37	100	1250	79	37	8.3	8.3	5.2
2	25	30	310	26	37	94	833	85	36	8.3	8.3	5.6
3	24	29	210	25	37	88	579	86	30	5.8	8.3	5.0
4	23	33	160	24	37	90	414	78	25	5.8	8.3	4.7
5	27	32	140	23	37	100	315	69	22	5.6	9.9	4.3
6	28	26	150	23	36	110	260	89	19	5.0	9.9	3.8
7	25	26	140	23	35	100	218	93	16	5.0	9.1	3.9
8	22	26	120	23	34	100	176	79	14	5.0	8.3	3.5
9	22	26	110	23	33	100	149	67	13	4.7	7.4	3.1
10	23	37	96	23	33	120	141	56	13	4.7	6.6	2.8
11	22	49	88	23	34	110	168	52	12	4.7	6.6	2.8
12	29	49	80	24	35	110	161	49	12	3.9	5.8	2.7
13	33	43	80	25	37	110	136	41	12	3.5	5.8	2.8
14	37	37	94	26	39	130	123	39	12	3.9	5.8	2.8
15	35	35	140	27	40	150	109	37	11	3.9	4.7	2.4
16	33	34	120	27	42	140	99	231	11	3.9	4.7	1.5
17	32	33	90	27	46	130	90	362	9.9	3.9	4.3	2.0
18	31	34	76	27	58	120	90	236	9.9	3.9	4.3	2.0
19	28	31	60	27	64	150	99	136	12	3.5	3.9	2.0
20	26	55	50	27	78	190	91	94	12	8.3	3.8	2.0
21	27	267	46	27	82	450	177	70	11	12	3.9	1.9
22	28	298	41	28	82	700	466	55	9.9	12	3.5	2.0
23	27	182	39	29	82	1000	452	47	9.1	9.1	3.1	3.9
24	27	100	36	30	82	1300	324	39	8.3	7.4	3.0	3.5
25	31	84	34	31	82	1600	352	35	8.3	5.8	2.9	1.8
26	34	72	32	32	84	1800	271	32	8.3	5.8	3.4	1.8
27	36	64	31	32	90	1920	173	29	8.3	5.4	3.8	2.4
28	35	59	30	33	96	1680	121	27	6.6	5.0	3.5	2.8
29	37	74	29	34	100	1060	97	25	5.8	5.0	3.1	2.9
30	31	580	28	35	---	1220	82	29	7.4	6.6	2.7	3.1
31	29	---	27	37	---	1560	---	34	---	9.9	3.7	---
TOTAL	895	2476	3157	848	1609	16632	8036	2482	421.8	185.8	170.7	91.0
MEAN	28.9	82.5	102	27.4	55.5	537	268	80.1	14.1	5.99	5.51	3.03
MAX	38	580	450	37	100	1920	1250	362	37	12	9.9	5.6
MIN	22	26	27	23	33	88	82	25	5.8	3.5	2.7	1.5
CFSM	.21	.60	.74	.20	.41	3.92	1.96	.58	.10	.04	.04	.02
IN.	.24	.67	.86	.23	.44	4.52	2.18	.67	.11	.05	.05	.02
CAL YR 1975 TOTAL	40018.3		MEAN 110	MAX 1450	MIN 5.3	CFSM .60	IN 10.87					
WTR YR 1976 TOTAL	37006.3		MEAN 101	MAX 1920	MIN 1.5	CFSM .74	IN 10.05					

04073500 FOX RIVER AT BERLIN, WI

LOCATION.--LAT 43°57'14", LONG 88°57'08", IN NE 1/4 SEC.16, T.17 N., R.13 E., GREEN LAKE COUNTY, HYDROLOGIC UNIT 04030201, ON LEFT BANK, 0.4 MI (0.6 KM) DOWNSTREAM FROM GOVERNMENT DAM, 1.0 MI (1.6 KM) SOUTH OF HURON STREET BRIDGE IN BERLIN, 2.5 MI (4.0 KM) UPSTREAM FROM BARNES CREEK, AND AT MILE 89.0 (KM 143).

DRAINAGE AREA.--1,430 MI² (3,780 KM²), APPROXIMATELY.

PERIOD OF RECORD.--JANUARY 1898 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1337: 1910.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 744.52 FT (226.930 M) ABOVE MEAN TIDE AT NEW YORK CITY (BY CORPS OF ENGINEERS). PRIOR TO OCT. 27, 1954, NONRECORDING GAGE AT SITE 0.3 MI (0.5 KM) UPSTREAM AT SAME DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE POOR. USUALLY LESS THAN ABOUT 5 FT³/S (0.14 M³/S) WAS DIVERTED INTO THE BASIN FROM THE WISCONSIN RIVER AT PORTAGE CANAL THROUGHOUT THE YEAR.

AVERAGE DISCHARGE.--78 YEARS, 1,093 FT³/S (30.95 M³/S), 10.38 IN/YR (264 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 6,900 FT³/S (195 M³/S) MAR. 17, 16, 1946, GAGE HEIGHT, 15.5 FT (4.724 M); MINIMUM OBSERVED, 248 FT³/S (7.02 M³/S) SEPT. 16, 1948, GAGE HEIGHT, 6.1 FT (1.859 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 3,420 FT³/S (96.9 M³/S) APR. 1, GAGE HEIGHT, 12.83 FT (3.911 M); MINIMUM DISCHARGE, 355 FT³/S (10.1 M³/S) SEPT. 10, GAGE HEIGHT, 7.41 FT (2.259 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CURIC FEET PER SECOND).
(SHIFTING-CONTROL METHOD USED JUNE 7-28; STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 19 TO FEB. 27.)

7.4	355	11.0	2,160
8.0	560	12.0	2,800
9.0	1,020	13.0	3,560
10.0	1,560		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	584	716	1030	1000	600	2640	3420	2660	990	406	503	416
2	568	652	990	920	580	2300	3410	2610	952	510	516	397
3	588	636	1080	760	560	1980	3350	2550	932	503	530	418
4	596	725	1180	600	560	1910	3310	2490	915	477	537	431
5	584	748	1310	560	560	1620	3250	2430	900	472	552	375
6	588	730	1350	620	560	1770	3170	2400	872	479	518	383
7	556	720	1310	680	560	1970	3080	2350	848	478	510	399
8	564	716	1290	660	580	2070	3000	2300	817	468	512	398
9	560	689	1300	640	580	2060	2920	2240	797	461	508	389
10	564	782	1280	620	608	2088	2850	2180	778	475	513	362
11	548	845	1220	600	608	2148	2820	2120	753	442	503	376
12	556	830	1160	600	620	2010	2760	2050	712	400	502	384
13	564	766	1070	600	640	1840	2680	1990	702	412	506	391
14	564	716	1130	600	660	1680	2600	1930	699	418	497	400
15	572	743	1170	620	700	1640	2550	1880	684	408	491	378
16	588	734	1130	620	740	1640	2510	1870	703	419	500	362
17	584	728	1060	600	820	1590	2470	1830	550	403	520	361
18	552	716	1100	580	900	1570	2430	1770	542	416	518	372
19	544	716	1180	580	1008	1660	2390	1730	513	431	515	375
20	552	738	1108	580	1100	1930	2338	1698	506	475	504	374
21	564	752	1100	600	1200	2170	2418	1630	522	470	486	367
22	564	707	1000	600	1400	2350	2520	1510	514	449	471	360
23	568	748	1008	600	1508	2488	2560	1350	501	462	461	379
24	616	756	1000	600	1600	2570	2660	1230	511	449	434	367
25	644	702	1800	600	1700	2600	2790	1160	513	437	439	385
26	608	636	1008	600	1800	2690	2830	1120	527	446	457	382
27	604	716	1000	600	2000	2890	2820	1090	513	446	463	383
28	698	800	1008	580	2348	3018	2798	1070	503	514	447	377
29	689	885	1008	580	2650	3140	2740	1040	518	499	420	394
30	694	1110	1808	580	---	3308	2700	1000	510	517	410	401
31	716	---	1000	580	---	3388	---	1010	---	522	410	---
TOTAL	18341	22370	34468	19560	29710	68680	84128	56288	20289	14244	15153	11536
MEAN	592	746	1112	631	1024	2215	2804	1815	676	459	489	385
MAX	716	1110	1358	1000	2658	3388	3420	2660	990	522	552	431
MIN	544	636	998	560	560	1570	2330	1008	501	400	410	360
CFSM	.41	.52	.78	.44	.72	1.55	1.96	1.27	.47	.32	.34	.27
IN.	.48	.58	.98	.51	.77	1.79	2.19	1.46	.53	.37	.39	.30
CAL YR 1975 TOTAL	411026			1126	MAX 4100	MIN 391	CFSM .79	IN 10.69				
WTR YR 1976 TOTAL	394743			1079	MAX 3420	MIN 368	CFSM .75	IN 10.27				

STREAMS TRIBUTARY TO LAKE MICHIGAN
04074950 WOLF RIVER AT LANGLADE, WI

LOCATION.--LAT 45°11'24", LONG 89°44'00", BETWEEN SECS.3 AND 10, T.31 N., R.14 E., LANGLADE COUNTY, HYDROLOGIC UNIT 04030202, NEAR LEFT BANK ON UPSTREAM SIDE OF BRIDGE HANDRAIL, ON STATE HIGHWAY 64 AT LANGLADE, 1.5 MI (2.4 KM) EAST OF WHITE LAKE, 3.0 MI (4.8 KM) UPSTREAM FROM WHITE LAKE CREEK, AND AT ABOUT MILE 170 (274 KM) ABOVE MOUTH.

DRAINAGE AREA.--460 MI² (1,191 KM²).

PERIOD OF RECORD.--MARCH 1966 TO CURRENT YEAR.

GAGE.--NONRECORDING GAGE. ALTITUDE OF GAGE IS ABOUT 1,240 FT (378 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

AVERAGE DISCHARGE.--10 YEARS, 478 FT³/S (13.54 M³/S), 14.11 IN/YR (358 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE OBSERVED, 2,200 FT³/S (62.3 M³/S) MAR. 15, 1973, GAGE HEIGHT, 9.48 FT (2.690 M); MAXIMUM GAGE HEIGHT OBSERVED, 9.98 FT (3.042 M) DEC. 5, 1968, (BACKWATER FROM ICE); MINIMUM DISCHARGE OBSERVED, 156 FT³/S (4.42 M³/S) AUG. 27-29, 1970.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE OBSERVED, 1,860 FT³/S (52.7 M³/S) MAR. 27, GAGE HEIGHT, 9.28 FT (2.829 M); MINIMUM OBSERVED, 170 FT³/S (4.98 M³/S) AUG. 25, SEPT. 12, GAGE HEIGHT, 7.30 FT (2.225 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 21 TO MAR. 25.)

7.3	176	8.5	930
7.5	260	9.0	1,440
8.0	540	10.0	3,140

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	344	324	600	270	250	350	1280	1010	458	289	260	238
2	334	355	740	260	250	360	1220	948	440	279	256	229
3	294	360	880	250	260	370	1420	895	422	251	238	225
4	279	313	880	250	260	380	1430	834	416	242	242	229
5	279	303	760	240	260	380	1360	792	388	234	313	225
6	279	303	660	240	260	360	1230	808	371	220	350	220
7	270	308	640	240	260	360	1250	703	355	274	329	216
8	260	270	640	240	270	360	1220	673	344	229	318	216
9	265	339	560	240	270	350	1220	574	350	220	298	212
10	265	464	460	240	270	350	1250	521	350	220	313	208
11	270	594	400	240	280	350	1260	508	344	220	334	192
12	279	574	370	240	280	350	1240	482	344	204	318	176
13	289	630	400	240	280	360	1230	482	382	212	318	180
14	279	703	460	240	290	390	1200	502	360	192	318	220
15	265	703	660	240	290	410	1200	495	350	208	298	216
16	303	680	700	240	300	410	1190	842	350	208	270	212
17	289	651	620	240	300	410	1180	1150	339	204	255	208
18	279	588	560	240	300	420	1560	1060	329	208	247	184
19	274	405	520	240	310	440	1770	1100	339	208	230	192
20	279	360	480	240	310	500	1640	1060	318	274	220	188
21	274	380	450	240	320	580	1660	975	313	284	200	200
22	274	390	430	240	320	720	1700	904	308	260	192	192
23	274	370	410	240	320	840	1620	808	298	234	188	215
24	279	350	400	240	320	1100	1570	742	298	216	180	229
25	289	330	390	230	320	1400	1360	608	303	208	176	229
26	360	300	370	230	330	1680	1260	495	298	204	192	224
27	355	300	360	230	330	1860	1190	446	289	200	204	243
28	355	340	340	230	330	1700	1130	422	284	204	196	259
29	344	410	330	240	340	1390	1060	394	289	208	204	250
30	339	500	310	240	---	1390	1010	428	303	212	212	238
31	329	---	290	240	---	1310	---	452	---	265	216	---
TOTAL	9147	12897	16070	7470	8480	21630	39910	22113	10332	7091	7885	6465
MEAN	295	430	518	241	292	698	1330	713	344	229	254	216
MAX	360	703	880	270	340	1860	1770	1150	458	289	350	259
MIN	260	270	290	230	250	350	1010	394	284	192	176	176
CFSM	.64	.93	1.13	.52	.63	1.52	2.89	1.55	.75	.50	.55	.47
IN.	.74	1.04	1.30	.60	.69	1.75	3.23	1.79	.84	.57	.64	.52
CAL YR 1975	TOTAL	164257	MEAN 450	MAX 1980	MIN 200	CFSM .98	IN 13.28					
WTR YR 1976	TOTAL	169490	MEAN 463	MAX 1860	MIN 176	CFSM 1.01	IN 13.71					

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04077000 WOLF RIVER AT KESHENA FALLS, WI

LOCATION.--LAT 44°53'28", LONG 88°39'18", IN E 1/2 SEC.22, T.28 N., R.15 E., MENOMINEE COUNTY, HYDROLOGIC UNIT 04030202, ON RIGHT BANK 500 FT (152 M) DOWNSTREAM FROM KESHENA FALLS, 1.7 MI (2.7 KM) UPSTREAM FROM KESHENA, 3.1 MI (5.0 KM) DOWNSTREAM FROM WEST BRANCH WOLF RIVER, AND AT MILE 136.4 (219.5 KM).

DRAINAGE AREA.--812 MI² (2,103 KM²).

PERIOD OF RECORD.--MAY 1907 TO MARCH 1909, OCTOBER 1910 TO CURRENT YEAR. MONTHLY DISCHARGE ONLY FOR SOME PERIODS, PUBLISHED IN WSP 1307. PUBLISHED AS "AT KESHENA" PRIOR TO APRIL 1928.

REVISED RECORDS.--WSP 664: DRAINAGE AREA (SITE AT KESHENA). WSP 1337: 1914-15(M), 1918-19(M), 1921, 1923(M), 1926(M), 1928(M), 1933.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 820.0 FT (249.936 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN POWER AND LIGHT CO.). PRIOR TO MAR. 23, 1928, NONRECORDING GAGE AT BRIDGE IN KESHENA 1.7 MI (2.7 KM) DOWNSTREAM AT DATUM 4.03 FT (1.23 M) LOWER.

REMARKS.--RECORDS FAIR.

AVERAGE DISCHARGE.--67 YEARS (1907-8, 1910-76), 762 FT³/S (21.58 M³/S), 12.74 IN/YR (324 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DAILY DISCHARGE 5,200 FT³/S (147 M³/S) MAR. 15, 1973; MAXIMUM GAGE HEIGHT, 13.86 FT (4.225 M) MAR. 15, 1973; BACKWATER FROM ICE; MINIMUM DISCHARGE, 91 FT³/S (2.58 M³/S) DEC. 22, 1939; GAGE HEIGHT, 4.67 FT (1.423 M), RESULT OF ICE STORAGE.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 1,500 FT³/S (42 M³/S) AND MAXIMUM (#):

DATE	TIME	DISCHARGE (FT ³ /S)	(M ³ /S)	GAGE HEIGHT (FT)	(M)	DATE	TIME	DISCHARGE (FT ³ /S)	(M ³ /S)	GAGE HEIGHT (FT)	(M)
DEC. 8	--	1,500	42	ICE JAM		APR. 19	2300	2,760	78.2	7.96	2.426
MAR. 31	1900	--	--	A*11.61	3.539	MAY 18	0300	2,080	58.9	7.34	2.237
APR. 1	0500	*4,500	127	A 11.41	3.478						

A BACKWATER FROM ICE

MINIMUM DISCHARGE, 346 FT³/S (9.80 M³/S) SEPT. 13, GAGE HEIGHT, 5.24 FT (1.597 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 21-24, NOV. 28 TO APR. 1.)

5.2	325	7.0	1,740
5.5	488	9.0	4,000
6.0	842		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	597	547	880	700	540	780	4000	1470	980	526	489	451
2	571	544	980	700	560	800	2390	1500	942	495	469	459
3	552	586	1500	680	560	820	2230	1440	909	473	450	437
4	511	573	1500	680	560	840	2100	1340	890	465	429	414
5	498	529	1200	660	560	880	2040	1280	869	456	468	394
6	493	520	1100	640	560	900	2030	1340	833	449	525	391
7	490	520	980	620	560	920	2030	1320	801	445	526	383
8	478	528	920	628	580	940	2030	1230	757	453	494	376
9	481	537	940	620	580	960	1940	1090	727	437	475	371
10	487	648	800	620	580	960	1940	983	691	426	502	363
11	490	897	700	620	600	960	2010	925	678	422	507	363
12	494	965	660	620	620	960	1930	888	649	405	515	356
13	507	932	700	620	620	960	1820	857	659	402	508	350
14	532	983	800	620	620	980	1750	873	664	402	500	368
15	561	1020	1000	620	620	1000	1760	887	636	394	489	391
16	563	1010	1200	620	620	1040	1760	1360	616	397	468	394
17	541	977	1300	620	620	1060	1750	1900	616	407	449	384
18	519	927	1200	620	640	1100	2030	1990	603	399	438	375
19	508	798	1150	600	660	1140	2610	1760	588	399	431	374
20	502	716	1100	580	680	1200	2660	1650	586	482	422	377
21	501	740	1050	580	680	1300	2570	1530	566	515	410	385
22	497	740	1000	580	680	1400	2580	1410	551	504	406	383
23	496	700	940	560	700	1500	2490	1320	539	457	402	376
24	506	620	900	560	720	1600	2330	1230	534	431	390	373
25	528	573	860	560	720	1800	2140	1150	545	412	384	372
26	577	606	820	540	720	2000	1950	993	541	402	379	370
27	590	657	800	520	740	2300	1750	832	521	396	397	378
28	579	700	780	520	760	2800	1650	810	508	393	397	391
29	573	740	760	520	760	3100	1560	831	533	409	385	404
30	561	800	740	540	---	3500	1500	901	545	437	380	399
31	551	---	720	540	---	3900	---	980	---	489	386	---
TOTAL	16334	21633	29980	18700	18420	44400	63330	38070	20077	13579	13870	11602
MEAN	527	721	967	603	635	1432	2111	1228	669	438	447	387
MAX	597	1020	1500	700	760	3900	4000	1990	980	526	526	459
MIN	478	520	660	520	540	780	1500	810	508	393	379	350
CFSM	.65	.89	1.19	.74	.78	1.76	2.60	1.51	.82	.54	.55	.48
IN.	.75	.99	1.37	.86	.84	2.03	2.90	1.74	.92	.62	.64	.53

CAL YR 1975 TOTAL 279381 MEAN 765 MAX 2650 MIN 378 CFSM .94 IN 12.80
WTR YR 1976 TOTAL 309995 MEAN 847 MAX 4000 MIN 350 CFSM 1.04 IN 14.20

STREAMS TRIBUTARY TO LAKE MICHIGAN

04078500 EMBARRASS RIVER NEAR EMBARRASS, WI

LOCATION.--LAT 44°43'29", LONG 88°44'10", IN SW 1/4 SEC.18, T.26 N., R.15 E., SHAWANO COUNTY, HYDROLOGIC UNIT 04030202, ON LEFT BANK 10 FT (3 M) DOWNSTREAM FROM BRIDGE ON COUNTY ROAD, 1.3 MI (2.1 KM) DOWNSTREAM FROM MILL CREEK, AND 4.0 MI (6.4 KM) NORTHWEST OF EMBARRASS.

DRAINAGE AREA.--395 MI² (1,023 KM²).

PERIOD OF RECORD.--JUNE 1919 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1337: 1920-26(M), 1928, 1929-30(M), 1933-34, 1936-37, 1938(M), 1940.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 803.95 FT (245.044 M) ABOVE MEAN SEA LEVEL. PRIOR TO AUG. 23, 1938, NONRECORDING GAGE AT SAME SITE AND DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR. SLIGHT DIURNAL FLUCTUATION CAUSED BY POWERPLANTS ABOVE STATION.

AVERAGE DISCHARGE.--57 YEARS, 290 FT³/S (8.213 M³/S), 9.97 IN/YR (253 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 7,080 FT³/S (200 M³/S) APR. 12, 1965, GAGE HEIGHT, 12.13 FT (3.697 M), AFFECTED BY FAILURE OF DAM NEAR PELLA, 9.2 MI (14.6 KM) ABOVE STATION; MINIMUM OBSERVED, 23 FT³/S (0.65 M³/S) AUG. 3, 6, 7, 1931.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 2,820 FT³/S (79.9 M³/S) MAR. 30, GAGE HEIGHT, 7.72 FT (2.353 M); MINIMUM DISCHARGE, 68 FT³/S (1.93 M³/S) SEPT. 11, 12, GAGE HEIGHT, 2.61 FT (0.796 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 24 TO MAR. 17.)

2.6	66	5.0	1,140
3.0	170	6.0	1,740
3.5	355	8.0	3,020
4.0	600		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158	147	390	240	160	190	2290	515	283	128	167	84
2	147	147	400	220	160	180	1850	545	267	130	153	87
3	153	147	420	200	160	180	1640	535	239	125	141	87
4	128	144	370	190	160	180	1470	495	204	119	128	82
5	138	144	300	180	160	190	1310	455	198	114	130	84
6	138	144	260	170	160	200	1170	425	189	133	128	82
7	141	147	230	160	160	190	1100	391	186	102	130	80
8	161	147	210	150	160	180	1020	435	179	89	130	78
9	104	153	190	140	160	170	918	400	170	94	125	78
10	122	189	190	140	160	170	840	368	167	94	130	73
11	144	267	180	150	160	180	795	327	161	94	195	73
12	144	400	160	150	170	170	750	295	156	89	198	73
13	147	360	150	150	170	170	710	279	156	89	156	75
14	164	300	160	150	180	170	645	283	156	89	141	75
15	173	260	170	150	190	180	605	287	156	87	136	73
16	182	230	200	150	200	200	610	545	147	87	136	73
17	179	220	380	160	220	190	615	1050	141	87	133	75
18	170	210	800	160	240	215	710	1150	147	87	128	82
19	164	220	720	160	230	189	1130	1010	147	89	119	89
20	156	240	660	160	220	303	1450	755	144	133	109	89
21	153	280	600	160	210	685	1560	510	138	164	102	89
22	150	280	540	160	200	942	1670	396	133	182	104	84
23	150	270	480	160	190	960	1560	339	130	158	96	84
24	150	270	440	160	180	1360	1370	295	130	130	92	84
25	150	280	400	160	180	1760	1250	287	133	114	89	82
26	153	290	380	160	180	1740	1040	267	130	114	87	82
27	164	310	360	160	180	1760	825	255	138	104	87	84
28	164	340	330	160	180	1660	645	247	125	104	82	87
29	158	380	300	160	180	1720	570	239	122	136	80	87
30	153	400	280	160	---	2150	500	255	125	173	78	89
31	150	---	260	160	---	2490	---	275	---	176	80	---
TOTAL	4708	7316	10910	5090	5260	21024	32618	13910	4889	3614	3790	2444
MEAN	152	244	352	164	181	678	1087	449	163	117	122	81.5
MAX	182	400	800	240	240	2490	2290	1150	283	182	198	89
MIN	104	144	150	140	160	170	500	239	122	87	78	73
CFSH	.38	.62	.89	.42	.46	1.72	2.75	1.14	.41	.30	.31	.21
IN.	.44	.69	1.03	.48	.50	1.98	3.07	1.31	.46	.34	.36	.23
CAL YR 1975 TOTAL	97883		MEAN 268	MAX 1630	MIN 34	CFSH .68	IN 9.22					
WTR YR 1976 TOTAL	115573		MEAN 316	MAX 2490	MIN 73	CFSH .80	IN 10.88					

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04079000 WOLF RIVER AT NEW LONDON, MI

LOCATION.--LAT 44°23'32", LONG 88°44'25", IN NE 1/4 SE 1/4 SEC.12, T.22 N., R.14 E., MAUPACA COUNTY, HYDROLOGIC UNIT 04030202, ON RIGHT BANK 100 FT (30 M) DOWNSTREAM FROM PEARL STREET BRIDGE IN NEW LONDON, 0.2 MI (0.3 KM) DOWNSTREAM FROM EMBARRASS RIVER, AND AT MILE 56.3 (90.6 KM).

DRAINAGE AREA.--2,240 MI² (5,800 KM²), APPROXIMATELY.

PERIOD OF RECORD.--MARCH 1896 TO CURRENT YEAR. PRIOR TO OCTOBER 1913 MONTHLY DISCHARGES ONLY, PUBLISHED IN WSP 1307.

REVISED RECORDS.--WSP 1114: 1943(M). WSP 1337: 1931.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 747.94 FT (227.972 M) ABOVE MEAN SEA LEVEL (LEVELS BY CORPS OF ENGINEERS). PRIOR TO OCTOBER 4, 1951, NONRECORDING GAGE.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

AVERAGE DISCHARGE.--80 YEARS, 1,733 FT³/S (49.08 M³/S), 10.51 IN/YR (267 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DAILY DISCHARGE, 15,500 FT³/S (439 M³/S) APR. 13, 1922, GAGE HEIGHT, 11.4 FT (3.47 M); MINIMUM DAILY, 150 FT³/S (4.25 M³/S) MAR. 1, 1900.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--FLOOD OF APR. 16, 1888, REACHED A STAGE OF 11.6 FT (3.54 M), FROM INFORMATION BY CORPS OF ENGINEERS.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 11,200 FT³/S (317 M³/S) APR. 1, GAGE HEIGHT, 10.45 FT (3.185 M); MINIMUM, 565 FT³/S (16.0 M³/S) SEPT. 15, 27, GAGE HEIGHT, 0.45 FT (0.137 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND) (SHIFTING-CONTROL METHOD USED OCT. 1-16; STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 30 TO MAR. 28.)

4	550	6.0	3,050
1.0	730	7.0	3,750
2.0	1,060	8.0	5,000
3.0	1,460	9.0	7,200
4.0	1,890	10.0	9,800
5.0	2,440	11.0	13,100

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1050	1050	1800	1420	1240	1600	11200	5700	2330	919	972	622
2	1050	1020	1900	1400	1240	1600	11200	5260	2180	886	925	643
3	1040	984	2000	1300	1240	1600	11000	4820	2070	874	904	679
4	1020	964	1980	1260	1240	1700	10500	4510	1960	853	892	697
5	1000	956	1940	1200	1300	1700	9890	4260	1860	841	883	688
6	960	956	1900	1140	1300	1700	9150	4060	1720	832	862	670
7	952	956	1900	1080	1300	1600	8500	3900	1600	814	874	637
8	944	960	1860	1060	1300	1600	7870	3750	1480	817	856	613
9	944	960	1800	1060	1300	1600	7300	3620	1400	799	853	604
10	956	1060	1800	1040	1300	1600	6800	3510	1380	769	871	604
11	922	1070	1800	1040	1340	1600	6350	3400	1360	763	871	601
12	913	1120	1800	1040	1340	1600	6000	3270	1370	742	883	589
13	928	1260	1800	1000	1340	1600	5660	3140	1340	730	916	589
14	931	1410	1800	1000	1400	1700	5340	2990	1320	742	931	583
15	940	1470	1900	1000	1400	1700	5060	2850	1320	736	913	571
16	960	1500	2000	1000	1440	1800	4820	2900	1270	718	898	589
17	1050	1510	2100	1000	1500	1800	4680	2950	1210	712	880	607
18	1120	1510	2100	1040	1500	1800	4560	3030	1200	673	871	613
19	1150	1510	2100	1060	1500	1800	4410	3100	1190	598	859	619
20	1140	1530	2000	1060	1600	2100	4280	3150	1160	661	832	628
21	1130	1600	2000	1080	1600	2400	4410	3160	1140	709	802	610
22	1110	1710	1900	1100	1600	3000	4600	3190	1110	787	775	574
23	1100	1030	1820	1100	1600	3900	4800	3250	1090	889	754	595
24	1110	1690	1800	1100	1600	4500	5460	3260	1080	874	748	601
25	1140	1880	1700	1160	1600	5200	6220	3200	1090	844	733	592
26	1100	1710	1600	1180	1600	6200	6750	3120	1070	814	727	574
27	1070	1620	1600	1200	1660	8000	6920	3000	1040	733	742	568
28	1040	1560	1520	1200	1700	10000	6770	2870	1030	745	740	586
29	1040	1540	1500	1200	1700	10500	6450	2760	1020	814	721	601
30	1040	1600	1480	1240	---	10800	6040	2630	980	877	691	604
31	1050	---	1460	1240	---	11100	---	2480	---	1020	652	---
TOTAL	31900	40696	56660	35000	41780	109400	203070	107090	41370	24545	25839	18351
MEAN	1029	1357	1820	1129	1441	3529	6769	3455	1379	793	834	612
MAX	1150	1890	2100	1420	1700	11100	11200	5700	2330	1020	972	697
MIN	913	956	1460	1000	1240	1600	4200	2480	980	598	652	568
CFSM	.46	.61	.82	.50	.64	1.58	3.02	1.54	.62	.35	.37	.27
IN.	.53	.68	.94	.58	.69	1.82	3.37	1.78	.69	.41	.43	.30
CAL YR 1975	TOTAL	667621	MEAN	1829	MAX	7720	MIN	588	CFSM	.82	IN	11.09
WTR YR 1976	TOTAL	735741	MEAN	2010	MAX	11200	MIN	568	CFSM	.90	IN	12.22

STREAMS TRIBUTARY TO LAKE MICHIGAN

04079602 LITTLE WOLF RIVER NEAR GALLOWAY, WI

LOCATION.--LAT 44°41'27", LONG 89°15'51", IN SW 1/4 NW 1/4 SEC.35, T.26 N., R.10 E., MARATHON COUNTY, HYDROLOGIC UNIT 04030202, ON RIGHT BANK 50 FT (15 M) DOWNSTREAM FROM STATE HIGHWAY 49 BRIDGE, AND 0.7 MI (1.1 KM) UPSTREAM FROM HOLT CREEK, AND 1.5 MI (2.4 KM) SOUTH OF GALLOWAY.

DRAINAGE AREA.--22.5 MI² (58.3 KM²).

PERIOD OF RECORD.--OCTOBER 1973 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 1,140 FT (347 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, AND THOSE FOR PERIOD OF NO GAGE HEIGHT RECORD, MAR. 21 TO APR. 27, WHICH ARE POOR. LOW FLOW AFFECTED BY IRRIGATION.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 138 FT³/S (3.91 M³/S) APR. 13, 1974, GAGE HEIGHT, 5.59 FT (1.704 M); MINIMUM DAILY, 3.1 FT³/S (0.088 M³/S) AUG. 6, 1975.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE PROBABLY OCCURRED MAR. 25, DISCHARGE NOT DETERMINED; MINIMUM DAILY, 5.2 FT³/S (0.147 M³/S) JULY 14, 15, SEPT. 13.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(SHIFTING-CONTROL METHOD USED OCT. 1 TO NOV. 19; STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 20 TO MAR. 20.)

3.0	3.4	4.5	55
3.2	7.3	5.0	88
3.5	15	5.5	135
4.0	31		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.7	9.9	34	14	10	10	76	40	18	8.5	10	6.6
2	9.5	9.5	33	14	9.8	10	72	42	17	7.0	9.8	6.4
3	9.2	9.5	23	13	9.8	11	70	38	16	7.7	9.0	6.1
4	9.2	9.2	21	14	10	12	68	34	15	8.2	8.6	5.9
5	9.5	9.2	21	13	10	12	66	32	13	8.1	9.6	6.1
6	9.5	9.2	20	13	10	11	64	32	13	7.8	9.3	6.1
7	9.5	9.2	18	13	10	10	62	30	12	7.2	8.6	5.9
8	9.5	9.2	17	13	10	10	60	27	12	5.9	8.0	5.6
9	10	9.5	16	13	10	11	56	26	11	6.0	7.7	5.7
10	11	19	15	13	10	10	50	24	11	7.2	9.3	5.9
11	10	19	14	13	10	11	52	22	11	7.2	10	5.8
12	10	16	14	14	10	11	56	21	10	7.0	8.7	5.3
13	10	14	14	14	10	11	52	20	11	6.5	8.3	5.2
14	11	13	17	13	9.6	11	48	20	11	5.2	10	6.2
15	12	12	22	12	11	10	44	20	12	5.2	9.1	7.0
16	12	11	40	11	12	10	43	51	12	7.0	8.2	6.7
17	11	11	39	11	13	10	46	73	11	6.8	7.7	6.4
18	11	11	36	11	12	10	52	57	11	6.5	7.4	6.2
19	10	12	34	11	11	11	58	38	11	8.1	7.1	6.2
20	10	15	32	11	10	25	66	31	10	16	6.8	6.3
21	10	29	30	11	9.6	40	64	25	10	12	6.6	6.2
22	9.9	25	28	11	10	50	62	23	9.8	9.0	6.4	6.2
23	10	21	26	11	11	58	60	21	9.7	8.3	6.3	6.3
24	11	18	24	11	11	64	54	19	9.6	6.7	6.1	6.2
25	12	17	22	11	10	78	52	18	8.7	5.7	6.1	6.2
26	12	14	21	10	10	66	48	17	9.7	6.3	6.2	6.3
27	11	13	20	10	11	64	45	15	9.4	6.9	6.3	6.4
28	11	13	18	10	11	64	42	15	9.2	22	6.0	6.3
29	10	15	17	10	11	66	36	15	9.4	24	5.9	6.3
30	10	31	16	10	---	70	34	19	9.6	13	5.9	6.2
31	9.9	---	15	10	---	74	---	20	---	11	6.0	---
TOTAL	320.4	433.4	717	369	302.8	921	1658	885	343.1	274.0	241.0	184.2
MEAN	10.3	14.4	23.1	11.9	10.4	29.7	55.3	26.5	11.4	8.84	7.77	6.14
MAX	12	31	40	14	13	78	76	73	18	24	10	7.0
MIN	9.2	9.2	14	10	9.6	10	34	15	8.7	5.2	5.9	5.2
CAL YR 1975	TOTAL	5418.9	MEAN	14.8	MAX	118	MIN	3.1				
WTR YR 1976	TOTAL	6648.9	MEAN	18.2	MAX	78	MIN	5.2				

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04082500 LAKE WINNEBAGO AT OSHKOSH, WI

LOCATION.--LAT 44°00'41", LONG 88°32'01", IN SW 1/4 SEC.24, T.18 N., R.16 E., WINNEBAGO COUNTY, HYDROLOGIC UNIT 04030203, IN MOUTH OF THE UPPER FOX RIVER AT CHICAGO AND NORTHWESTERN RAILWAY BRIDGE, 0.2 MI (0.3 KM) DOWNSTREAM FROM MAIN STREET BRIDGE IN OSHKOSH AND 18 MI (29 KM) SOUTH OF MENASHA DAM AND OUTLET.

DRAINAGE AREA.--6,030 MI² (15,600 KM²), APPROXIMATELY, AT LAKE OUTLET AT MENASHA DAM.

PERIOD OF RECORD.--OCTOBER 1938 TO CURRENT YEAR IN REPORTS OF GEOLOGICAL SURVEY. RECORDS FROM 1857 TO 1938 IN FILES OF CORPS OF ENGINEERS. A REPORT ON FOX RIVER BY CORPS OF ENGINEERS, PUBLISHED AS HOUSE DOCUMENT NO. 146, 67TH CONGRESS, 2ND SESSION, CONTAINS SEMI-MONTHLY RECORDS OF INFLOW OF LAKE WINNEBAGO FOR THE PERIOD 1896-1917.

GAGE.--NONRECORDING GAGE READ ONCE DAILY. DATUM OF GAGE IS 745.05 FT (227.091 M) ABOVE MEAN TIDE AT NEW YORK CITY (LEVELS BY CORPS OF ENGINEERS). PRIOR TO 1882, LAKE LEVELS WERE REFERRED TO DEUCHMAN GAGE AT LAKE OUTLET OF MENASHA DAM. DATUM OF DEUCHMAN GAGE, WHICH IS STILL IN EXISTENCE, IS 745.00 FT (227.076 M) ABOVE MEAN TIDE AT NEW YORK CITY.

REMARKS.--LAKE ELEVATIONS CONTROLLED BY DAMS AT MENASHA AND NEENAH, WHICH ARE OPERATED IN THE INTEREST OF NAVIGATION. CRESTS OF BOTH DAMS ARE AT ELEVATION 746.73 FT (227.603 M). PRESENT LIMITS OF REGULATION ARE FROM 21 1/4 IN. (540 MM) ABOVE THE CREST OF MENASHA DAM TO CREST DURING NAVIGATION SEASON, PLUS ADDITIONAL 18 IN. (457 MM) BELOW CREST DURING WINTER. OSHKOSH STAFF GAGE GIVES TRUE LEVEL OF LAKE, WHILE DEUCHMAN GAGE READINGS ARE AFFECTED BY LOSS OF HEAD IN THE CHANNEL BETWEEN LAKE AND DAM.

COOPERATION.--RECORDS FURNISHED BY CORPS OF ENGINEERS.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM GAGE HEIGHT OBSERVED, 5.33 FT (1.62 M) (DEUCHMAN GAGE) NOV. 8, 1881, MINIMUM OBSERVED, -2.00 FT (-0.61 M) (DEUCHMAN GAGE) NOV. 28, 1891.

EXTREMES FOR CURRENT YEAR.--MAXIMUM GAGE HEIGHT OBSERVED, 3.26 FT (0.994 M) JUNE 1; MINIMUM OBSERVED, 0.80 FT (0.244 M) MAR. 1, 11.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.62	2.28	2.41	1.96	1.22	.80	2.16	3.08	3.26	2.72	2.54	2.19
2	2.64	2.24	2.44	2.00	1.26	.82	2.30	3.18	3.21	2.70	2.56	2.19
3	2.58	2.26	2.45	1.94	1.18	.83	2.41	3.14	3.20	2.64	2.49	2.12
4	2.58	2.28	2.44	1.90	1.15	.86	2.43	3.18	3.19	2.63	2.45	2.14
5	2.50	2.26	2.44	1.86	1.12	.92	2.54	3.13	3.17	2.60	2.40	2.13
6	2.57	2.28	2.48	1.84	1.10	.88	2.63	3.12	3.15	2.58	2.44	2.06
7	2.54	2.29	2.43	1.82	1.06	.87	2.67	3.06	3.13	2.56	2.44	2.06
8	2.52	2.26	2.44	1.80	1.04	.85	2.71	3.04	3.11	2.56	2.44	2.09
9	2.44	2.38	2.44	1.78	1.04	.84	2.74	3.06	3.14	2.45	2.42	2.02
10	2.48	2.06	2.42	1.73	1.03	.82	2.80	2.93	3.05	2.48	2.39	2.06
11	2.48	2.32	2.44	1.72	1.00	.80	2.90	3.04	3.03	2.47	2.38	2.03
12	2.42	2.26	2.40	1.66	.99	.82	2.77	2.96	3.00	2.48	2.40	2.00
13	2.42	2.27	2.39	1.66	.96	.84	2.77	2.98	3.01	2.45	2.43	1.96
14	2.40	2.27	2.36	1.64	.96	.84	2.80	3.01	3.00	2.43	2.44	1.96
15	2.42	2.30	2.42	1.60	.95	.84	2.72	3.03	2.98	2.45	2.36	1.98
16	2.45	2.30	2.34	1.60	.93	.84	2.78	3.10	2.90	2.48	2.38	2.02
17	2.44	2.29	2.37	1.56	.94	.84	2.76	3.14	2.89	2.40	2.38	1.96
18	2.43	2.30	2.32	1.54	.98	.83	2.68	3.08	2.84	2.39	2.32	1.95
19	2.39	2.28	2.30	1.52	.99	.83	2.70	3.11	2.84	2.38	2.34	1.98
20	2.36	2.27	2.30	1.50	.97	.92	2.74	3.11	2.84	2.28	2.34	1.90
21	2.36	2.26	2.26	1.49	.96	1.01	2.82	3.13	2.84	2.43	2.32	1.97
22	2.36	2.34	2.24	1.45	.96	1.08	2.90	3.09	2.82	2.40	2.32	1.92
23	2.34	2.37	2.22	1.42	.93	1.16	2.92	3.15	2.84	2.38	2.31	1.86
24	2.30	2.42	2.18	1.41	.91	1.20	3.08	3.10	2.81	2.44	2.28	1.86
25	2.28	2.36	2.16	1.36	.88	1.28	3.06	3.10	2.74	2.42	2.27	1.87
26	2.30	2.41	2.14	1.36	.87	1.42	2.99	3.14	2.74	2.40	2.24	1.86
27	2.30	2.34	2.12	1.34	.86	1.54	3.02	3.16	2.73	2.38	2.26	1.88
28	2.28	2.36	2.08	1.30	.84	1.71	3.06	3.18	2.72	2.56	2.22	1.84
29	2.30	2.41	2.06	1.26	.83	1.77	3.08	3.15	2.76	2.44	2.22	1.84
30	2.30	2.42	2.02	1.28	---	1.86	3.07	3.19	2.85	2.46	2.18	1.83
31	2.19	---	2.00	1.26	---	2.06	---	3.22	---	2.58	2.17	---
MEAN	2.42	2.30	2.31	1.60	.99	1.06	2.77	3.10	2.96	2.48	2.36	1.98
MAX	2.64	2.42	2.48	2.00	1.22	2.06	3.08	3.22	3.26	2.72	2.56	2.19
MIN	2.19	2.06	2.00	1.26	.83	.80	2.16	2.93	2.72	2.28	2.17	1.83
WTR YR 1976	MEAN	2.20	MAX	3.26	MIN	.80						

STREAMS TRIBUTARY TO LAKE MICHIGAN

04084500 FOX RIVER AT RAPIDE CROCHE DAM, NEAR WRIGHTSTOWN, WI

LOCATION.--LAT 44°19'03", LONG 88°11'50", IN SE 1/4 SEC.4, T.21 N., R.19 E., OUTAGAMIE COUNTY, HYDROLOGIC UNIT 04030204, AT RAPIDE CROCHE DAM, 2.0 MI (3.2 KM) UPSTREAM FROM WRIGHTSTOWN, AND 18 MI (29 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--6,150 MI² (15,930 KM²), APPROXIMATELY.

PERIOD OF RECORD.--MARCH 1896 TO SEPTEMBER 1917 (MONTHLY DISCHARGE ONLY), OCTOBER 1917 TO CURRENT YEAR.

GAGE.--RECORDING HEADWATER AND TAILWATER GAGES AND ELECTRIC GENERATION ARE READ THREE TIMES A DAY AND USED TO COMPUTE THE DISCHARGE RECORDS.

REMARKS.--RECORDS GOOD. FLOW REGULATED BY STORAGE IN LAKE WINNEBAGO (SEE STA. 04082500). DAILY DISCHARGE DETERMINED FROM RECORDS OF FLOW THROUGH TURBINES, HEAD, GATE OPENINGS, AND LOCKAGES THROUGH NAVIGATION CANAL. USUALLY LESS THAN ABOUT 5 FT³/S (0.14 M³/S) DIVERTED INTO BASIN FROM WISCONSIN RIVER AT PORTAGE CANAL THROUGHOUT THE YEAR.

COOPERATION.--FIGURES OF DAILY DISCHARGE FURNISHED BY CORPS OF ENGINEERS. RECORDS REVIEWED BY GEOLOGICAL SURVEY.

AVERAGE DISCHARGE.--80 YEARS, 4,184 FT³/S (118.5 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DAILY DISCHARGE, 24,000 FT³/S (680 M³/S) APR. 18, 1952; MINIMUM DAILY, 138 FT³/S (3.91 M³/S) AUG. 2, 1936.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DAILY DISCHARGE DURING YEAR, 14,200 FT³/S (402 M³/S) APR. 10; MINIMUM DAILY, 740 FT³/S (21.0 M³/S) SEPT. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2530	1940	2980	5040	3580	5460	10700	11400	2960	1680	1480	1200
2	2520	2140	2810	5000	3560	5910	10200	11200	4160	1640	1410	1080
3	2750	2000	3150	4280	3720	4900	10400	11900	4080	1730	1380	1380
4	2700	2100	3680	4070	3640	4680	10500	11900	4120	1570	1520	1080
5	2820	1970	4340	4440	3480	4780	12500	12100	3860	1560	1550	1140
6	2770	2110	3950	3800	3820	5290	13200	11600	3740	1820	1330	1000
7	2790	2280	3960	4590	3920	5440	12600	11100	3780	1860	1480	1080
8	2530	1790	4060	4390	3780	5120	13400	11200	3690	1730	1460	905
9	2560	1960	4600	3990	3900	5880	13900	11000	3760	1740	1330	1210
10	3120	2150	4620	4310	3770	5940	14200	10300	3680	1660	1380	1030
11	1710	2140	4290	4150	3900	5600	12800	9090	3330	1580	1320	995
12	2440	1980	4220	4900	3900	5610	13800	7450	3060	1340	1530	1010
13	2600	1980	4580	3800	3860	4840	13800	4220	2860	1690	1350	1140
14	1950	1740	4620	4200	3890	5460	12800	4150	3210	1580	1140	1040
15	1460	2080	5380	4480	4180	5550	12500	4270	3300	1370	1200	1020
16	1800	1990	4680	4000	4180	5560	12500	4380	2740	1340	1320	985
17	2200	2180	5920	3980	4300	5780	12400	4460	2380	1560	1300	960
18	2310	2190	4960	4080	5000	5480	12100	4480	2230	1360	1390	1060
19	2180	1410	5860	4270	5400	5770	12200	4630	1660	1600	1400	860
20	2150	1860	4910	4210	5420	8580	10100	4690	1640	1980	1240	970
21	2280	1900	5280	4460	4820	7100	10300	4820	2020	1360	1260	855
22	1740	920	5280	4270	4840	5960	10500	4560	2020	1420	1340	840
23	1780	1810	5270	4530	5360	6180	10400	4100	1880	1380	1050	940
24	2080	1800	5570	3760	5580	6940	11100	3480	1880	1480	1150	885
25	2300	2440	5640	4240	5680	7520	10700	2040	1880	1220	1090	850
26	2080	2950	5310	4000	5960	8360	10200	2870	1880	1440	1190	885
27	2300	2200	5320	3400	6000	9400	11200	2640	1870	1360	1260	740
28	2160	3200	5050	3920	6140	8500	11600	2580	1600	1880	1100	905
29	2030	2540	5040	4020	5860	8610	11500	2820	1700	1360	1020	1020
30	2130	3910	4970	3860	---	10400	11400	2260	1480	1780	1210	840
31	2340	---	5080	4020	---	10500	---	2590	---	1520	1180	---
TOTAL	71110	63660	145380	130460	131440	201100	355500	200280	82450	48590	40360	29905
MEAN	2294	2122	4690	4208	4532	6487	11850	6461	2748	1567	1302	997
MAX	3120	3910	5920	5040	6140	10500	14200	12100	4160	1980	1550	1380
MIN	1460	920	2810	3400	3480	4680	10100	2040	1480	1220	1020	740
CAL YR 1975	TOTAL	1443725	MEAN	3955	MAX	14500	MIN	915				
WTR YR 1976	TOTAL	1500235	MEAN	4099	MAX	14200	MIN	740				

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04085000 FOX RIVER AT WRIGHTSTOWN, WI
(NATIONAL STREAM QUALITY ACCOUNTING NETWORK STATION)
(NATIONAL PESTICIDE MONITORING NETWORK STATION)

LOCATION.--LAT 44°19'36", LONG 88°09'54", IN NE 1/4 NW 1/4 SEC.2, T.21 N., R.19 E., BROWN COUNTY, HYDROLOGIC UNIT 04030204, AT BRIDGE ON STATE HIGHWAY 96 AT WRIGHTSTOWN.

DRAINAGE AREA.--6,210 MI² (16,100 KM²), APPROXIMATELY.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1970, 1974 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: MARCH 1975 TO CURRENT YEAR.
WATER TEMPERATURES: MARCH 1975 TO CURRENT YEAR.

REMARKS.--RECORDS OF DISCHARGE ARE GIVEN FOR 04084500 FOX RIVER AT RAPIDE CROCHE DAM NEAR WRIGHTSTOWN.

COOPERATION.--PESTICIDE SAMPLES WERE COLLECTED BY THE U.S. GEOLOGICAL SURVEY AND WERE ANALYZED BY ENVIRONMENTAL PROTECTION AGENCY.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: MAXIMUM DAILY, 640 MICROMHDS APR. 27, 1975; MINIMUM DAILY, 175 MICROMHOS AUG. 29, 1975.
WATER TEMPERATURES: MAXIMUM DAILY, 31.0°C JULY 13, 1976; MINIMUM DAILY, 0.0°C ON MANY DAYS DURING WINTER PERIOD.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: MAXIMUM DAILY, 610 MICROMHOS JAN. 11, 12, 13; MINIMUM DAILY, 325 MICROMHOS MAY 9.
WATER TEMPERATURES: MAXIMUM DAILY, 31.0°C JULY 13; MINIMUM DAILY, 0.0°C ON MANY DAYS DURING WINTER PERIOD.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS-CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. ONIES PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT , 1975										
17...	0945	2200	375	7.4	12.0	10	--	--	380	930
NOV										
14...	0900	1740	410	7.9	5.0	10	--	--	560	2700
DEC										
19...	1015	5860	370	7.8	.0	10	--	--	770	690
JAN , 1976										
15...	1300	4480	305	7.5	.0	4	--	--	730	570
FEB										
11...	1610	3900	430	7.1	.0	4	--	--	8550	750
MAR										
10...	0930	5940	455	8.1	1.5	3	--	--	77	133
APR										
13...	1715	13800	360	7.0	8.0	10	--	--	83	77
MAY										
11...	1800	9090	240	8.0	14.0	6	--	--	859	823
JUN										
08...	1530	3690	380	7.9	24.0	10	--	--	220	828
JUL										
21...	1700	1360	375	8.3	26.5	7	--	--	670	530
AUG										
10...	1500	1380	400	8.3	25.0	18	--	--	200	90
SEP										
13...	1730	1140	430	7.8	22.0	12	5.4	64	570	87

DATE	HARD- NESS (CA, MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT , 1975										
17...	170	30	37	18	14	15	.5	2.6	166	0
NOV										
14...	170	22	37	18	14	15	.5	2.6	176	0
DEC										
19...	170	20	37	20	8.8	10	.3	2.2	189	0
JAN , 1976										
15...	180	24	38	21	9.3	10	.3	2.4	192	0
FEB										
11...	170	19	35	21	13	14	.4	2.2	189	0
MAR										
10...	190	29	40	21	9.3	10	.3	2.2	192	0
APR										
13...	170	23	38	18	7.2	8	.2	2.2	178	0
MAY										
11...	160	23	34	18	7.2	9	.2	2.0	166	0
JUN										
08...	150	3	33	16	0.5	11	.3	2.4	177	0
JUL										
21...	170	39	40	18	15	16	.5	2.4	165	0
AUG										
10...	160	24	35	18	15	17	.5	2.6	168	0
SEP										
13...	190	46	41	21	17	16	.5	2.7	174	0

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085000 FOX RIVER AT WRIGHTSTOWN, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	ALKA-LINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
OCT , 1975										
17...	136	11	30	18	.4	3.7	218	206	.30	1300
NOV										
14...	144	3.5	33	18	.4	3.1	228	211	.31	1070
DEC										
19...	155	4.8	27	13	.2	6.0	234	207	.32	3700
JAN , 1976										
15...	157	9.7	30	14	.2	5.1	229	215	.31	2770
FEB										
11...	155	24	33	19	.2	5.0	247	222	.34	2600
MAR										
10...	157	2.4	30	14	.3	5.8	229	217	.31	3670
APR										
13...	146	28	25	10	.1	3.9	199	192	.27	7420
MAY										
11...	136	2.7	23	10	.2	.1	193	176	.26	4740
JUN										
08...	145	3.6	22	11	.2	.8	203	181	.28	2020
JUL										
21...	135	1.3	34	18	.2	.1	229	209	.31	841
AUG										
10...	138	1.3	30	18	.2	2.3	207	204	.28	771
SEP										
13...	143	4.4	40	24	.2	.2	242	232	.33	745

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCORRECTED PERI-PHYTON CHLOROPHYLL B MG/SQ M	UNCORRECTED PERI-PHYTON CHLOROPHYLL A MG/SQ M
OCT , 1975										
17...	.01	1.3	1.3	5.8	.14	12	9.10	13.0	.20	6.7
NOV										
14...	.01	.92	.93	4.1	.03	--	--	--	--	--
DEC										
19...	.06	.96	1.0	4.5	.11	--	--	--	--	--
JAN , 1976										
15...	.02	.75	.77	3.4	.07	10	--	--	--	--
FEB										
11...	.05	.93	.98	4.3	.05	--	--	--	--	--
MAR										
10...	.17	.70	.87	3.9	.09	--	--	--	--	--
APR										
13...	.06	1.1	1.2	5.1	.10	12	--	--	--	--
MAY										
11...	.01	.85	.86	3.8	.09	--	--	--	--	--
JUN										
08...	.03	.90	.93	4.1	.09	--	--	--	--	--
JUL										
21...	.02	1.8	1.8	8.1	.13	--	2.54	9.31	.15	2.3
AUG										
10...	.04	2.0	2.0	9.0	.14	--	--	--	--	--
SEP										
13...	.03	2.0	2.0	9.0	.27	--	--	--	--	--

04085000 FOX RIVER AT WRIGHTSTOWN, MI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS-CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDEO ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	SUS-PENDEO CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDEO CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBAL T (CO) (UG/L)
OCT , 1975												
17...	0945	2200	1	1	0	0	0	0	<10	<10	0	0
JAN , 1976												
15...	1300	4400	1	1	0	1	0	1	20	10	10	0
APR												
13...	1715	13000	0	0	0	0	0	0	<10	0	<10	1
JUL												
21...	1700	1360	2	2	0	2	2	0	<10	0	<10	1

DATE	SUS-PENDEO COBAL T (CO) (UG/L)	DIS-SOLVED COBAL T (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS-PENDEO COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS-PENDEO LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)
OCT , 1975											
17...	0	0	10	10	0	360	70	7	7	0	30
JAN , 1976											
15...	0	0	10	10	0	160	10	8	5	3	20
APR											
13...	0	1	10	10	0	410	30	8	5	3	40
JUL											
21...	1	0	0	0	0	260	10	22	19	3	40

DATE	SUS-PENDEO MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDEO MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDEO SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDEO ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT , 1975											
17...	10	20	<.5	.0	<.5	0	0	0	30	30	4
JAN , 1976											
15...	0	20	<.5	.0	<.5	0	0	0	10	0	10
APR											
13...	30	10	<.5	.0	<.5	0	0	0	20	20	0
JUL											
21...	40	0	<.5	.0	<.5	2	2	0	10	0	10

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085000 FOX RIVER AT WRIGHTSTOWN, WI--CONTINUED

PESTICIDE ANALYSES

DATE	TIME	DIS-CHARGE (CFS)	TOTAL ALORIN (UG/L)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ATRA-ZINE (UG/L)	ATRA-ZINE IN BOTTOM MATERI-AL (UG/KG DRY SOLIDS)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA-TERIAL (UG/KG)
OCT , 1975										
17...	0945	2200	.00	.0	--	--	.0	0	.00	.0
FEB , 1976										
11...	1610	3900	.00	.0	.00	--	.0	0	.00	.0
MAY										
11...	1800	9090	.00	.0	.00	.0	.0	0	.00	.0
AUG										
18...	0830	1390	.00	--	.00	--	.0	--	.00	--

DATE	TOTAL ODE (UG/L)	DDE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTDOM MA-TERIAL (UG/KG)	TOTAL DI-AZINON (UG/L)	DI-AZINON IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)
OCT , 1975										
17...	.00	.0	.00	.0	.00	.0	.00	--	.00	--
FEB , 1976										
11...	.00	.0	.00	.0	.00	.0	.00	--	.00	--
MAY										
11...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0
AUG										
18...	.00	--	.00	--	.00	--	.00	--	.00	--

DATE	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MA-TERIAL (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL MALA-THION (UG/L)	TOTAL METH-OXY-CHLOR (UG/L)
OCT , 1975										
17...	.00	--	.00	.0	.00	.0	.00	.0	.00	.00
FEB , 1976										
11...	.00	--	.00	.0	.00	.0	.00	.0	.00	.00
MAY										
11...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.00
AUG										
18...	.00	--	.00	--	.00	--	.00	--	.00	.00

DATE	METHOX-YCHLOR IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL METHYL PARA-THION (UG/L)	METHYL PARA-THION IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL METHYL TRI-THION (UG/L)	METHYL TRI-THION IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL PARA-THION (UG/L)	PARA-THION IN BOTTOM MA-TERIAL (UG/KG)	SIMA-ZINE TOTAL (UG/L)	SIMA-ZINE IN BOTTOM MATERI-AL (UG/KG DRY SOLIDS)	TOTAL TOX-APHENE (UG/L)
OCT , 1975										
17...	.0	.00	.0	.00	.0	.00	.0	--	--	0
FEB , 1976										
11...	.0	.00	.0	.00	.0	.00	.0	--	--	0
MAY										
11...	.0	.00	.0	.00	.0	.00	.0	--	.0	0
AUG										
18...	--	.00	--	.00	--	.00	--	.00	--	0

DATE	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TRI-THION IN BOTTOM MA-TERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MA-TERIAL (UG/KG)	TOTAL 2,4,5-T (UG/L)	2,4,5-T IN BOTTOM MA-TERIAL (UG/KG)	TOTAL SILVEX (UG/L)	SILVEX IN BOTTOM MA-TERIAL (UG/KG)
OCT , 1975									
17...	--	.00	.0	--	--	--	--	--	--
FEB , 1976									
11...	--	.00	.0	.00	--	.00	--	.00	--
MAY									
11...	0	.00	.0	.00	0	.00	0	.00	0
AUG									
18...	--	.00	--	.00	--	.00	--	.00	--

04085000 FOX RIVER AT WRIGHTSTOWN, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct. 17, 1975	1200	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	250	<1	
		<i>Chlamydomonas</i>	1,000	1	
		<i>Dictyosphaerium</i>	5,000	4	
		<i>Oocystis</i>	1,000	1	
		<i>Schroederia</i>		0	
		<i>Selenastrum</i>		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Cyclotella</i>	1,700	1	
		<i>Melosira</i>	3,800	3	
		<i>Nitzschia</i>		0	
		<i>Stephanodiscus</i>	250	<1	
		CYANOPHYTA			
		Myxophyceae			
		<i>Anabaena</i>	3,500	3	
		<i>Anacystis</i>	66,000	49	
		<i>Aphanizomenon</i>	3,500	3	
		<i>Gomphosphaeria</i>		0	
		<i>Oscillatoria</i>	49,000	36	
EUGLENOPHYTA					
Cryptophyceae					
<i>Cryptomonas</i>	250	<1			
TOTAL		130,000			
Nov. 14, 1975	0900	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Actinastrum</i>		0	
		<i>Ankistrodesmus</i>		0	
		<i>Oocystis</i>	520	1	
		<i>Scenedesmus</i>	260	<1	
		<i>Staurastrum</i>		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Asterionella</i>	920	1	
		<i>Cocconeis</i>		0	
		<i>Cyclotella</i>		0	
		<i>Diatoma</i>		0	
		<i>Gomphonema</i>		0	
		<i>Melosira</i>	6,600	10	
		<i>Navicula</i>		0	
		<i>Nitzschia</i>		0	
		<i>Stephanodiscus</i>		0	
		<i>Surirella</i>		0	
		<i>Synedra</i>		0	
		CYANOPHYTA			
Myxophyceae					
<i>Agmenellum</i>		0			
<i>Anacystis</i>	4,200	6			
<i>Anacystis incerta</i>	9,500	14			
<i>Gomphosphaeria</i>		0			
<i>Oscillatoria</i>	45,000	67			
TOTAL		67,000			
Dec. 19, 1975	1015	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Actinastrum</i>	570	1	
		<i>Ankistrodesmus</i>		0	
		<i>Scenedesmus</i>	460	1	
		<i>Selenastrum</i>		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Asterionella</i>		0	
		<i>Cyclotella</i>	2,300	3	
		<i>Fragilaria</i>	460	1	
		<i>Melosira</i>	1,400	2	
		<i>Navicula</i>		0	
		<i>Nitzschia</i>		0	
		<i>Stephanodiscus</i>		0	
		CYANOPHYTA			
		Myxophyceae			
		<i>Anacystis</i>	19,000	25	
		<i>Anacystis incerta</i>	50,000	64	
		<i>Gomphosphaeria</i>	910	1	
		<i>Oscillatoria</i>	1,800	2	
TOTAL		78,000			

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085000 FOX RIVER AT WRIGHTSTOWN, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method	
Jan. 15, 1976	1300	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Ankistrodesmus</i>		0		
		<i>Dactylothece</i>	150	1		
		<i>Kirchneriella</i>		0		
		<i>Oocystis</i>	120	1		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Asterionella</i>	270	2		
		<i>Cyclotella</i>	420	3		
		<i>Cymbella</i>		0		
		<i>Fragilaria</i>		0		
		<i>Gomphonema</i>		0		
		<i>Nelosira</i>		0		
<i>Navicula</i>		0				
CYANOPHYTA						
Myxophyceae						
<i>Anacystis</i>	13,000	84				
<i>Oscillatoria</i>	1,200	8				
TOTAL		15,000				
Feb. 11, 1976	1610	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Ankistrodesmus</i>	44	1		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Asterionella</i>	44	1		
		<i>Nelosira</i>	220	6		
		<i>Nitzschia</i>	130	3		
		<i>Stephanodiscus</i>		0		
		<i>Surirella</i>		0		
		CYANOPHYTA				
		Myxophyceae				
		<i>Lynghya</i>		0		
		<i>Oscillatoria</i>		88		
TOTAL		3,800				
Mar. 10, 1976	0930	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Dictyosphaerium</i>		0		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Asterionella</i>		0		
		<i>Cyclotella</i>	55	1		
		<i>Cymbella</i>		0		
		<i>Fragilaria</i>	3,800	90		
		<i>Nelosira</i>	160	4		
		<i>Navicula</i>	82	2		
		<i>Nitzschia</i>	82	2		
		<i>Stephanodiscus</i>		0		
		<i>Synedra</i>	55	1		
CYANOPHYTA						
Myxophyceae						
<i>Oscillatoria</i>		0				
TOTAL		4,300				
Apr. 13, 1976	1715	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Ankistrodesmus</i>	440	1		
		<i>Dictyosphaerium</i>		0		
		<i>Scenedesmus</i>		0		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Asterionella</i>		0		
		<i>Cocconeis</i>		0		
		<i>Cyclotella</i>	37,000	74		
		<i>Cymbella</i>		0		
		<i>Diatoma</i>		0		
		<i>Epithemia</i>		0		
		<i>Fragilaria</i>		0		
		<i>Gomphonema</i>		0		
		<i>Nelosira</i>	440	1		
		<i>Navicula</i>		0		
		<i>Nitzschia</i>		0		
		<i>Stephanodiscus</i>		0		
		<i>Surirella</i>		0		
		<i>Synedra</i>		0		
		CYANOPHYTA				
Myxophyceae						
<i>Anacystis</i>		0				
<i>Lynghya</i>	12,000	24				
<i>Oscillatoria</i>		0				
EUGLENOPHYTA						
Cryptophyceae						
<i>Cryptomonas</i>		0				
Euglenophyceae						
<i>Trachelomonas</i>		0				
TOTAL		50,000				

04085000 FOX RIVER AT WRIGHTSTOWN, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method			
May 11, 1976	1800	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		Actinastrum		0				
		Ankistrodesmus		0				
		Chlorella		0				
		Crucigenia	780	1				
		Dictyosphaerium	7,000	10				
		Gloeoactinium	1,600	2				
		Kirchneriella		0				
		Micractinium		0				
		Scenedesmus	390	1				
		Tetrastrum	780	1				
		CHRYSOPHYTA						
		Bacillariophyceae						
		Asterionella	4,900	7				
		Cyclotella	8,200	12				
		Melosira	780	1				
		Nitzschia	970	1				
		CYANOPHYTA						
		Myxophyceae						
		Anacystis	41,000	59				
		Gomphosphaeria		0				
		Oscillatoria	1,700	3				
TOTAL		69,000						
June 8, 1976	1530	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		Ankistrodesmus	230	1				
		Micractinium		0				
		Oocystis	700	4				
		Pediastrum		0				
		Scenedesmus	230	1				
		Schroederia	180	1				
		Staurastrum		0				
		CHRYSOPHYTA						
		Bacillariophyceae						
		Achnanthes		0				
		Asterionella		0				
		Cocconeis		0				
		Cyclotella	3,400	19				
		Cymbella		0				
		Diatoma		0				
		Fragilaria	530	3				
		Melosira	640	4				
		Navicula		0				
		Nitzschia	820	5				
		Rhoicosphenia		0				
		Stephanodiscus		0				
		Synedra	120	1				
		CYANOPHYTA						
		Myxophyceae						
		Anabaena		0				
		Anacystis	9,100	51				
		Aphanizomenon	1,500	8				
		Gomphosphaeria		0				
		Lyngbya		0				
		Oscillatoria		0				
		EUGLENOPHYTA						
		Cryptophyceae						
		Chroomonas	120	1				
		Cryptomonas	230	1				
		Euglenophyceae						
		Euglena		0				
		TOTAL		18,000				
		July 21, 1976	1700	CHLOROPHYTA				Grab sample
				Chlorophyceae				
				Ankistrodesmus			0	
				Dictyosphaerium			0	
Oocystis				0				
Scenedesmus				0				
CHRYSOPHYTA								
Bacillariophyceae								
Cyclotella				0				
Diatoma				0				
Melosira				0				
Navicula				0				
Nitzschia				0				
Stephanodiscus				0				
CYANOPHYTA								
Myxophyceae								
Agmenellum	5,800			1				
Anabaena	75,000			9				
Anacystis	60,000			7				
Anacystis incerta	720,000			82				
Aphanizomenon				0				
Oscillatoria				0				
TOTAL				880,000				

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085000 FOX RIVER AT WRIGHTSTOWN, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method	
Aug. 10, 1976	1500	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Actinastrum</i>	11,000	4		
		<i>Ankistrodesmus</i>	3,100	1		
		<i>Chlamydomonas</i>		0		
		<i>Coelastrum</i>	13,000	5		
		<i>Crucigenia</i>	3,100	1		
		<i>Dicetyosphaerium</i>	3,100	1		
		<i>Gloeoactinium</i>	4,700	2		
		<i>Kirchneriella</i>		0		
		<i>Oocystis</i>	3,100	1		
		<i>Scenedesmus</i>	3,100	1		
		<i>Selenastrum</i>		0		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Cyclotella</i>	3,500	1		
		<i>Nelosira</i>		0		
		<i>Nitzschia</i>		0		
		<i>Stephanodiscus</i>		0		
		CYANOPHYTA				
		Myxophyceae				
		<i>Anabaena</i>	57,000	22		
		<i>Anacystis</i>	35,000	13		
<i>Anacystis incerta</i>	88,000	33				
<i>Aphanizomenon</i>	9,000	3				
<i>Oscillatoria</i>	24,000	9				
EUGLENOPHYTA						
Cryptophyceae						
<i>Cryptomonas</i>		0				
TOTAL		260,000				
Sept. 13, 1976	1730	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Ankistrodesmus</i>		0		
		<i>Kirchneriella</i>	2,400	1		
		<i>Scenedesmus</i>	2,400	1		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Cyclotella</i>		0		
		<i>Nitzschia</i>		0		
		<i>Stephanodiscus</i>		0		
		CYANOPHYTA				
		Myxophyceae				
		<i>Anabaena</i>	12,000	4		
		<i>Anacystis</i>	5,300	2		
		<i>Anacystis incerta</i>	39,000	13		
		<i>Aphanizomenon</i>	27,000	9		
		<i>Lyngbya</i>	15,000	5		
		<i>Oscillatoria</i>	200,000	66		
		TOTAL		310,000		

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT , 1975						
17...	0945	12.0	2200	19	113	--
DEC						
19...	1015	.0	5860	15	237	100
JAN , 1976						
15...	1300	.0	4480	34	411	89
FEB						
11...	1610	.0	3900	8	84	22
MAR						
10...	0930	1.5	5940	1	16	50
APR						
13...	1715	8.0	13800	36	1340	87
MAY						
11...	1800	14.0	9090	23	564	85
JUN						
08...	1530	24.0	3690	19	189	93
JUL						
21...	1700	26.5	1360	22	81	85
AUG						
10...	1500	25.0	1380	26	97	85
SEP						
13...	1730	22.0	1140	27	83	84

04065000 FOX RIVER AT WRIGHTSTOWN, WI--CONTINUED

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	340	380	375	395	440	415	375	330	365	305	380	405
2	350	390	390	400	435	405	360	330	365	375	380	400
3	345	365	400	400	435	405	355	330	365	405	370	410
4	355	375	420	430	440	405	360	330	360	360	390	420
5	350	360	380	460	490	405	350	330	360	---	380	410
6	350	380	385	415	475	405	350	340	360	---	390	410
7	340	390	390	400	440	400	350	340	360	---	400	400
8	475	360	390	405	450	405	360	340	360	---	400	385
9	350	370	375	430	525	400	350	325	360	---	380	390
10	355	380	375	400	535	405	355	330	360	---	375	400
11	350	365	360	610	530	455	350	340	390	---	365	415
12	350	390	410	610	525	435	350	345	390	---	385	410
13	350	375	365	610	595	460	350	360	390	410	360	410
14	350	390	370	---	710	475	355	365	375	400	385	410
15	370	390	365	---	415	440	355	365	375	410	380	425
16	405	390	380	395	420	465	360	360	375	410	365	460
17	360	385	395	390	415	440	350	360	375	425	375	430
18	375	375	400	365	415	460	350	360	410	410	390	440
19	375	380	410	410	405	460	345	360	390	410	360	430
20	355	375	400	415	400	600	345	360	390	400	360	430
21	355	365	400	420	410	500	350	360	390	365	370	440
22	355	405	400	410	410	395	355	360	395	380	370	430
23	360	415	400	420	410	415	350	350	400	400	370	430
24	360	400	400	410	410	410	360	350	400	400	370	430
25	360	400	400	415	405	410	370	350	395	400	370	450
26	365	405	395	420	405	400	360	375	395	390	370	450
27	360	380	390	420	405	395	345	365	390	365	380	440
28	355	410	390	420	410	390	345	390	365	370	380	450
29	360	400	395	415	410	405	340	370	365	390	360	440
30	375	435	395	410	---	395	340	375	400	390	360	450
31	360	---	395	410	---	390	---	355	---	390	360	---
MONTH	366	369	391	431	454	427	353	352	360	---	380	423

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.5	12.5	0.0	0.0	0.0	0.0	3.0	10.0	20.0	25.5	25.0	21.0
2	10.5	10.0	0.0	0.0	0.0	0.0	3.0	11.0	20.0	27.0	23.0	24.0
3	12.0	10.0	0.0	0.0	0.0	0.0	4.0	7.0	21.5	27.5	24.0	19.5
4	12.5	9.0	0.0	0.0	0.0	0.0	4.0	6.5	21.0	27.0	25.0	21.0
5	13.5	9.5	0.0	0.0	0.0	0.0	5.0	7.0	23.0	---	27.0	23.5
6	12.0	11.5	1.0	0.0	0.0	0.0	5.0	10.0	24.0	---	24.0	19.5
7	12.5	12.5	0.0	0.0	0.0	0.0	6.0	9.0	25.5	---	23.0	27.0
8	13.5	14.5	0.0	0.0	0.0	0.0	7.0	11.5	25.0	---	24.0	22.0
9	14.5	11.5	0.0	0.0	0.0	0.0	7.5	13.0	25.0	---	27.0	21.0
10	13.5	10.0	0.0	0.0	0.0	0.0	6.5	12.0	24.0	---	25.0	19.0
11	13.5	7.5	0.0	0.0	0.0	0.0	6.0	12.5	25.0	---	27.0	20.0
12	12.5	7.0	0.0	0.0	0.0	0.0	7.0	12.0	25.0	---	28.0	21.0
13	14.5	11.5	0.0	0.0	0.0	0.0	7.5	11.0	25.5	31.0	26.0	19.0
14	16.5	3.0	4.5	0.0	0.0	0.0	10.0	13.0	25.0	29.0	26.0	19.0
15	14.5	2.5	0.0	0.0	0.0	0.0	10.0	13.0	24.0	27.0	26.0	16.5
16	11.0	10.0	0.0	0.0	0.0	0.0	11.5	12.0	23.0	28.0	24.5	18.0
17	13.0	5.5	0.0	0.0	0.0	0.0	13.0	13.0	24.5	25.0	23.5	16.0
18	12.5	6.5	0.0	0.0	0.0	0.0	13.5	13.0	23.0	24.0	23.5	24.5
19	10.5	6.0	0.0	0.0	0.0	0.0	12.5	13.0	25.0	24.0	24.0	21.0
20	10.5	7.5	0.0	0.0	0.0	0.0	11.5	16.0	26.5	25.0	23.5	17.0
21	9.5	6.0	0.0	0.0	0.0	0.0	11.0	17.5	24.0	27.0	25.0	16.0
22	10.0	4.0	0.0	0.0	0.0	0.0	10.0	19.0	26.0	27.0	26.0	15.0
23	12.5	3.5	0.0	0.0	0.0	0.0	4.0	11.0	25.0	27.0	26.5	13.0
24	13.5	2.0	0.0	0.0	0.0	0.0	4.0	8.0	26.0	29.0	27.5	12.0
25	11.5	0.5	0.0	0.0	0.0	0.0	4.5	6.5	26.5	30.0	27.0	15.0
26	11.0	0.0	0.0	0.0	0.0	5.0	7.5	16.5	27.0	26.0	27.0	16.0
27	9.5	0.0	0.0	0.0	0.0	5.5	6.0	18.0	27.0	27.0	26.0	15.0
28	10.5	0.0	0.0	0.0	0.0	5.0	10.0	19.0	27.0	21.0	25.0	12.5
29	7.5	0.0	0.0	0.0	0.0	4.5	9.0	20.0	23.5	24.0	25.0	12.0
30	6.5	0.0	0.0	0.0	---	5.0	10.0	19.0	23.5	24.0	24.0	12.5
31	6.0	---	0.0	0.0	---	4.5	---	20.0	---	23.0	25.0	---
MONTH	12.0	6.5	0.0	0.0	0.0	1.5	8.0	14.0	24.5	---	25.5	16.5

STREAMS TRIBUTARY TO LAKE MICHIGAN

04085200 KEWAUNEE RIVER NEAR KEWAUNEE, WI

LOCATION.--LAT 44°27'30", LONG 87°33'23", IN SW 1/4 SEC.14, T.23 N., R.24 E., KEWAUNEE COUNTY, HYDROLOGIC UNIT 04030102, ON LEFT BANK JUST DOWNSTREAM FROM BRIDGE ON COUNTY TRUNK HIGHWAY F, 2.3 MI (3.7 KM) WEST OF KEWAUNEE, AND ABOUT 7.0 MI (11.3 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--129 MI² (344 KM²).

PERIOD OF RECORD.--ANNUAL MAXIMUM, WATER YEARS 1958-65, AND OCCASIONAL LOW-FLOW MEASUREMENTS, WATER YEARS 1963-64, SEPTEMBER 1964 TO CURRENT YEAR. NO WINTER RECORDS FOR YEARS 1965 AND 1966.

GAGE.--WATER-STAGE RECORDER AND CREST-STAGE GAGE. ALTITUDE OF GAGE IS ABOUT 590 FT (180 M), FROM TOPOGRAPHIC MAP. APR. 3, 1957, TO SEPT. 2, 1964, CREST-STAGE GAGE ONLY AT SAME SITE AND DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

AVERAGE DISCHARGE.--10 YEARS, 85.3 FT³/S (2.416 M³/S), 8.98 IN/YR (228 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 6,500 FT³/S (184 M³/S) MAR. 30, 1960, GAGE HEIGHT, 16.03 FT (4.886 M); MINIMUM RECORDED, 4.5 FT³/S (0.13 M³/S) NOV. 3, 4, 1966, GAGE HEIGHT, 8.14 FT (2.481 M).

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 800 FT³/S (23 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)		GAGE HEIGHT (FT) (M)		DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)		GAGE HEIGHT (FT) (M)	
MAR. 21	0500	*3,260	92.3	*13.76	4.194	MAR. 27	1500	1,850	52.4	12.48	3.804
MAR. 25	0500	2,170	61.5	12.86	3.920	MAR. 31	0400	1,010	28.6	11.45	3.490

MINIMUM DISCHARGE, 8.2 FT³/S (0.232 M³/S) SEPT. 11, 13, 14, GAGE HEIGHT, 8.43 FT (2.569 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 20 TO MAR. 18.)

8.3	5.0	9.5	152
8.4	9.0	10.0	292
8.6	20	11.0	715
8.8	38	12.0	1,390
9.1	76	14.0	3,590

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	23	172	17	12	110	557	120	52	18	24	13
2	36	23	99	16	12	110	420	126	44	17	17	11
3	35	24	75	16	12	100	302	120	38	17	14	11
4	35	25	56	15	12	98	227	103	35	16	14	11
5	34	24	54	15	12	96	185	96	32	15	15	11
6	32	24	99	15	12	94	172	128	30	15	14	11
7	30	24	81	14	12	90	148	110	29	15	14	11
8	30	24	61	14	13	86	128	91	28	15	13	10
9	30	24	49	13	13	84	114	79	26	15	13	10
10	30	29	47	13	13	80	118	70	24	15	13	9.5
11	30	33	47	13	13	86	160	65	24	15	13	9.1
12	29	30	45	13	13	92	132	59	24	14	12	9.1
13	29	29	38	13	13	110	112	57	24	14	12	9.1
14	28	27	62	12	14	140	101	58	28	14	11	9.1
15	29	26	122	12	14	230	96	59	28	14	11	10
16	20	26	84	12	15	220	99	162	26	14	11	10
17	27	25	67	12	15	192	107	187	24	14	11	10
18	26	25	48	13	17	160	118	114	24	13	11	10
19	26	26	36	13	18	140	139	81	24	13	11	10
20	26	35	34	13	20	990	110	67	24	20	11	11
21	26	76	31	13	22	2520	200	58	22	21	11	9.5
22	25	65	27	13	26	1010	286	53	21	17	9.5	9.5
23	25	49	26	13	30	770	205	49	21	16	9.5	10
24	25	40	24	13	45	1570	286	46	21	15	9.1	10
25	25	37	23	13	52	1600	615	42	21	14	9.5	11
26	24	33	22	12	70	840	312	40	19	14	10	11
27	24	33	20	12	92	1500	177	39	19	13	10	11
28	24	32	20	12	100	793	132	38	18	15	12	11
29	24	39	18	12	110	440	108	52	18	16	10	11
30	23	107	18	12	---	571	99	61	19	21	9.5	11
31	23	---	17	12	---	858	---	57	---	42	11	---
TOTAL	877	1117	1622	411	822	15780	5965	2487	787	507	376.1	310.9
MEAN	28.3	37.2	52.3	13.3	28.3	509	199	80.2	26.2	16.4	12.1	10.4
MAX	39	187	172	17	110	2520	615	187	52	42	24	13
MIN	23	23	17	12	12	80	96	38	18	13	9.1	9.1
CFSM	.22	.29	.41	.10	.22	3.95	1.54	.62	.20	.13	.09	.88
IN.	.25	.32	.47	.12	.24	4.55	1.72	.72	.23	.15	.11	.09
CAL YR 1975 TOTAL		38659.0		MEAN 106		MAX 3000		MIN 9.0		CFSM .82		IN 11.15
WTR YR 1976 TOTAL		31062.0		MEAN 84.9		MAX 2520		MIN 9.1		CFSM .66		IN 8.96

STREAMS TRIBUTARY TO LAKE MICHIGAN

04085281 EAST TWIN RIVER AT MISHICOT, WI

LOCATION.--LAT 44°14'16", LONG 87°38'11", IN NW 1/4 NW 1/4 SEC.4, T.20 N., R.24 E., MANITOWOC COUNTY, HYDROLOGIC UNIT 04030101, ON RIGHT BANK 500 FT (152 M) DOWNSTREAM FROM BRIDGE ON STATE HIGHWAY 147, AT MISHICOT, 0.8 MI (1.3 KM) UPSTREAM FROM JOHNSON CREEK, AND 9.8 MI (15.8 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--111 MI² (287 KM²).

PERIOD OF RECORD.--JULY 1972 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 584.72 FT (178.223 M) ABOVE MEAN SEA LEVEL.

REMARKS.--RECORDS FAIR EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE POOR. OCCASIONAL REGULATION CAUSED BY RECREATION DAM 0.3 MI (0.5 KM) UPSTREAM.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 3,090 FT³/S (87.5 M³/S) MAY 28, 1973, GAGE HEIGHT, 13.19 FT (4.020 M); MINIMUM, 5.0 FT³/S (0.14 M³/S) SEPT. 13, 14, 1976, GAGE HEIGHT, 3.77 FT (1.149 M).

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 500 FT³/S (14.2 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)	DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)
DEC. 3	0500	738 20.9	9.23 2.813	MAR. 27	1200	*1,420 40.2	*11.09 3.380
MAR. 21	0800	945 26.8	9.93 3.027	APR. 25	1400	543 15.4	8.36 2.548

MINIMUM DISCHARGE, 5.0 FT³/S (0.14 M³/S) SEPT. 13, 14, GAGE HEIGHT, 3.77 FT (1.149 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE JAN. 9 TO MAR. 4.)

OCT. 1 TO MAR. 27

MAR. 28 TO SEPT. 30

4.0	11	8.0	480	3.7	3.0	5.0	86
4.5	37	9.0	679	3.8	6.1	5.5	137
5.0	80	10.0	967	3.9	10	6.0	195
6.0	195	11.0	1,370	4.0	15	7.0	330
7.0	330			4.2	26	9.0	679
				4.5	45	11.0	1,370

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	19	62	13	10	110	492	121	59	16	19	6.4
2	19	19	46	13	10	100	387	135	52	15	17	6.2
3	18	19	82	12	10	98	306	119	44	13	16	6.0
4	18	19	36	12	10	100	242	99	36	13	13	5.8
5	18	26	32	12	10	120	195	90	33	12	12	5.6
6	18	19	39	12	10	151	170	118	29	12	12	5.4
7	18	19	43	11	10	135	148	120	28	11	12	5.2
8	18	20	35	11	10	110	127	101	25	10	11	5.2
9	18	21	25	12	10	78	114	81	24	9.6	11	5.2
10	18	25	19	11	11	68	111	69	23	9.4	10	5.4
11	19	27	19	11	11	75	135	62	21	9.2	9.2	5.2
12	18	27	19	11	12	91	134	55	20	8.8	8.8	5.2
13	18	25	21	11	13	206	118	52	20	8.4	8.6	5.0
14	18	25	25	11	15	241	104	52	19	8.6	8.4	5.2
15	16	25	32	10	19	257	95	54	19	8.8	8.2	5.2
16	16	24	40	10	27	218	95	194	19	9.0	8.0	5.2
17	16	23	42	10	32	192	106	218	19	9.2	7.8	5.4
18	16	22	37	11	42	148	113	164	18	9.0	7.6	5.4
19	15	22	30	10	40	193	105	100	18	9.2	7.6	5.4
20	16	27	26	10	39	531	93	74	18	10	7.4	5.2
21	16	45	22	11	38	872	120	62	17	13	6.8	5.2
22	16	51	19	11	36	751	194	55	17	12	6.4	5.4
23	16	39	18	10	36	642	194	49	15	12	6.2	5.4
24	16	32	17	10	36	732	221	46	15	11	5.8	5.8
25	15	26	16	11	38	823	512	43	15	11	5.6	6.0
26	15	27	15	10	43	759	435	41	15	9.8	5.6	6.2
27	16	26	15	10	68	1180	278	38	16	9.6	5.8	6.4
28	16	26	14	11	88	925	167	37	15	11	6.0	6.4
29	16	36	14	10	110	585	121	49	15	15	5.8	6.6
30	17	64	13	10	---	497	103	66	16	19	5.6	6.8
31	19	---	13	10	---	534	---	66	---	23	5.6	---
TOTAL	528	819	886	338	844	11522	5735	2630	700	357.6	278.0	169.0
MEAN	17.0	27.3	28.6	10.9	29.1	372	191	84.8	23.3	11.5	6.97	5.63
MAX	19	64	82	13	110	1180	512	218	59	23	19	6.8
MIN	15	19	13	10	10	68	93	37	15	8.4	5.6	5.0
CFSM	.15	.25	.26	.10	.26	3.35	1.72	.76	.21	.10	.08	.05
IN.	.18	.27	.30	.11	.28	3.86	1.92	.88	.23	.12	.09	.06
CAL YR 1975	TOTAL	24751.9	MEAN 67.8	MAX 1610	MIN 7.0	CFSM .61	IN 8.30					
WTR YR 1976	TOTAL	24806.6	MEAN 67.8	MAX 1180	MIN 5.0	CFSM .61	IN 8.31					

STREAMS TRIBUTARY TO LAKE MICHIGAN

04085427 MANITOWOC RIVER AT MANITOWOC, WI

LOCATION.--LAT 44°06'26", LONG 87°42'55", IN NE 1/4 NW 1/4 SEC.23, T.19 N., R.23 E., MANITOWOC COUNTY, HYDROLOGIC UNIT 04030101, ON RIGHT BANK 308 FT (91 M) UPSTREAM FROM BRIDGE ON COUNTY TRUNK HIGHWAY JJ, JUST WEST OF THE MANITOWOC CITY LIMITS AND 6.6 MI (10.6 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--530 MI² (1,373 KM²).

PERIOD OF RECORD.--JULY 1972 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 610.12 FT (185.965 M) ABOVE MEAN SEA LEVEL.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 4.010 FT³/S (114 M³/S) MAR. 27, 1976, GAGE HEIGHT, 10.42 FT (3.176 M); MAXIMUM GAGE HEIGHT, 11.50 FT (3.505 M) MAR. 4, 1974 (BACKWATER FROM ICE); MINIMUM DISCHARGE, 13 FT³/S (0.37 M³/S) SEPT. 14, 1976, GAGE HEIGHT, 3.71 FT (1.131 M).

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 890 FT³/S (22.7 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)	DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)
MAR. 7	1500	1.540	43.6	7.73	2.356	MAR. 27	0500	*4.010	114	*10.42	3.176
MAR. 21	2300	3.630	106	10.27	3.130	APR. 25	0300	1.866	52.7	8.19	2.496

MINIMUM DISCHARGE, 13 FT³/S (0.37 M³/S) SEPT. 14, GAGE HEIGHT, 3.71 FT (1.131 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 3 TO MAR. 3.)

3.7	11	6.0	590
3.8	16	7.0	1,080
3.9	25	9.0	2,490
4.2	69	10.0	3,500
4.6	150	10.5	4,080
5.0	248		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	33	128	43	33	610	2390	1080	168	35	48	17
2	51	31	154	42	32	720	2220	1040	157	34	48	17
3	51	33	180	41	32	890	2030	1000	145	33	42	17
4	51	33	150	40	32	1120	1850	957	130	30	39	17
5	49	34	160	40	32	1260	1780	899	119	28	38	16
6	45	35	170	38	33	1320	1670	859	113	26	35	15
7	44	37	160	37	32	1370	1550	815	103	25	34	14
8	44	37	160	36	33	1310	1430	776	89	24	34	14
9	41	38	150	36	34	1270	1340	724	85	23	31	15
10	39	41	150	36	36	1210	1260	665	76	24	30	15
11	37	45	140	36	41	1130	1190	604	67	24	30	14
12	37	57	130	37	49	1070	1140	562	60	22	28	14
13	37	46	110	36	60	1080	1060	511	57	21	26	14
14	37	45	100	37	72	781	979	469	73	21	25	13
15	37	45	100	37	100	767	915	435	67	21	24	14
16	37	49	60	37	150	762	844	550	62	24	22	14
17	38	74	46	37	200	734	805	522	56	24	21	14
18	38	87	60	36	290	734	771	491	59	23	21	14
19	38	91	66	36	340	1030	738	465	52	23	21	14
20	38	101	64	36	380	2180	697	435	52	31	20	15
21	37	111	60	36	360	3560	706	378	49	39	19	15
22	42	115	56	35	360	2860	795	321	46	31	18	15
23	37	117	54	35	350	2710	864	269	44	30	18	15
24	37	113	52	35	410	2880	1030	256	45	29	15	15
25	37	93	50	34	460	2820	1680	233	44	25	15	15
26	37	128	50	34	510	2730	1540	212	42	23	15	15
27	44	123	48	34	500	3570	1270	187	39	22	15	15
28	41	111	47	35	510	2980	1210	171	35	35	16	15
29	35	115	46	35	550	2510	1150	171	37	48	16	15
30	34	139	45	34	---	2510	1100	190	37	46	15	16
31	34	---	43	33	---	2480	---	183	---	67	15	---
TOTAL	1255	2157	2989	1134	6041	52958	38004	16456	2208	911	794	448
MEAN	40.5	71.9	96.4	36.6	208	1708	1267	531	73.6	29.4	25.6	14.9
MAX	51	139	180	43	550	3570	2390	1080	168	67	48	17
MIN	34	31	43	33	32	610	697	171	35	21	15	13
CFSM	.08	.14	.18	.07	.39	3.22	2.39	1.00	.14	.06	.05	.03
IN.	.09	.15	.21	.08	.42	3.72	2.67	1.15	.15	.06	.05	.03
CAL YR 1975	TOTAL	102873	MEAN 282	MAX 3220	MIN 16	CFSM .53	IN 7.22					
WTR YR 1976	TOTAL	125349	MEAN 342	MAX 3570	MIN 13	CFSM .65	IN 8.80					

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04085500 CEDAR LAKE NEAR KIEL, MI

LOCATION.--LAT 43°55'35", LONG 87°56'23", IN SW 1/4 SEC.5, T.17 N., R.21 E., MANITOWOC COUNTY, HYDROLOGIC UNIT 04030101, ON NORTH SHORE OF CEDAR LAKE AT PUBLIC BEACH, 0.8 MI (1.3 KM) SOUTHEAST OF LOUIS CORNERS, AND 5.1 MI (8.2 KM) NORTHEAST OF KIEL.

DRAINAGE AREA.--1.33 MI² (3.44 KM²).

PERIOD OF RECORD.--AUGUST 1936 TO SEPTEMBER 1942; APRIL 1945 TO CURRENT YEAR (FRAGMENTARY).

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 895 FT (273 M), FROM TOPOGRAPHIC MAP. PRIOR TO MAY 8, 1974, NONRECORDING GAGE AT SITE 500 FT (152 M) SOUTHWEST AND AT ALTITUDE 5 FT (1.5 M) LOWER.

REMARKS.--ADD 90 FT (27 M) TO OBTAIN ELEVATION ABOVE DATUM ASSUMED FOR THIS LAKE BY WISCONSIN DEPARTMENT OF NATURAL RESOURCES. DAILY WATER AND AIR TEMPERATURES FOR THIS STATION FOR THE 1976 WATER YEAR ARE AVAILABLE BUT NOT PUBLISHED.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM ELEVATION, 99.23 FT (30.245 M) MAY 16, 1976; MINIMUM OBSERVED, 93.34 FT (28.450 M) OCT. 4, NOV. 1, 1958; JAN. 17, 1959.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--AN ELEVATION OF 100.37 FT (30.592 M) WAS OBSERVED MAY 20, 1929, BY WISCONSIN DEPARTMENT OF NATURAL RESOURCES.

EXTREMES FOR CURRENT YEAR.--MAXIMUM ELEVATION, 99.23 FT (30.245 M) MAY 16; MINIMUM, 97.63 FT (29.758 M) SEPT. 30.

REVISIONS.--REVISED DAILY STAGES FOR WATER YEAR 1975 ARE GIVEN BELOW. THESE FIGURES SUPERSEDE THOSE PUBLISHED IN THE REPORT FOR 1975:

OCT 2	8.16	OCT 20	8.13	NOV 6	8.01	NOV 19	8.03	DEC 2	8.01	DEC 15	8.09	JAN 1	8.11
6	8.17	21	8.12	7	8.00	20	8.03	3	8.01	16	8.14	2	8.11
7	8.18	24	8.11	8	8.00	21	8.02	4	8.00	17	8.14	3	8.11
8	8.17	25	8.11	9	8.00	22	8.01	5	7.99	22	8.13	4	8.11
10	8.15	26	8.10	10	8.01	23	8.02	6	7.99	23	8.13	5	8.11
11	8.14	27	8.10	11	8.08	24	8.04	7	8.03	24	8.13	6	8.11
12	8.14	28	8.09	12	8.08	25	8.04	8	8.07	25	8.13	7	8.11
13	8.13	29	8.09	13	8.07	26	8.03	9	8.06	26	8.12	8	8.11
14	8.15	30	8.09	14	8.06	27	8.03	10	8.07	27	8.12	9	8.11
15	8.15	NOV 1	8.07	15	8.05	28	8.03	11	8.07	28	8.12	10	8.12
16	8.15	2	8.05	16	8.05	29	8.03	12	8.07	29	8.12	11	8.17
17	8.15	3	8.03	17	8.04	30	8.02	13	8.06	30	8.12	12	8.17
18	8.14	4	8.03	18	8.04	DEC 1	8.01	14	8.06	31	8.11	29	8.15
19	8.13	5	8.02										

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.35	8.03	8.05	8.05	8.12	8.22	8.96	9.22	9.13	8.74	---	8.03
2	8.32	8.02	8.06	8.05	8.12	8.28	8.97	9.22	9.12	8.72	8.51	8.01
3	8.30	8.02	8.05	8.05	8.11	8.30	8.97	9.21	9.11	8.70	---	7.99
4	8.30	8.02	8.05	8.05	8.10	8.35	8.96	9.20	9.10	8.69	---	7.98
5	8.29	8.01	8.06	8.05	8.09	8.44	8.96	9.20	9.09	8.67	---	7.96
6	8.27	8.01	8.05	8.05	8.09	8.44	8.96	9.21	9.08	8.66	---	7.94
7	8.25	8.01	8.04	8.06	8.09	8.44	8.95	9.20	9.07	8.64	---	7.93
8	8.25	8.01	8.04	8.07	8.09	8.44	8.94	9.20	9.06	8.62	---	7.91
9	8.25	8.01	8.06	8.07	8.08	8.44	8.94	9.19	9.04	8.60	8.36	7.90
10	8.25	8.01	8.06	8.07	8.08	8.44	8.95	9.18	9.02	8.59	---	7.89
11	8.22	8.00	8.07	8.07	8.08	8.44	8.96	9.17	9.01	8.57	---	7.86
12	8.20	7.99	8.06	8.07	8.08	8.46	8.96	9.16	8.98	8.54	---	7.84
13	8.21	7.98	8.06	8.07	8.07	8.51	8.96	9.15	8.96	8.51	---	7.83
14	8.21	7.97	8.08	8.07	8.07	8.51	8.95	9.15	9.01	8.50	---	7.81
15	8.21	7.97	8.08	8.08	8.09	8.51	9.02	9.16	9.00	8.49	8.31	7.80
16	8.18	7.96	8.07	8.10	8.10	8.51	9.05	9.23	8.97	8.48	---	7.78
17	8.17	7.96	8.05	8.10	8.11	8.51	9.07	9.22	8.94	8.45	---	7.78
18	8.15	7.95	8.05	8.09	8.15	8.51	9.08	9.21	8.92	8.43	---	7.77
19	8.15	7.95	8.04	8.09	8.16	8.53	9.08	9.19	8.91	8.41	8.23	7.77
20	8.14	7.97	8.10	8.09	8.16	8.59	9.07	9.19	8.90	---	8.22	7.76
21	8.14	7.99	8.10	8.10	8.19	8.63	9.10	9.18	8.88	---	8.20	7.75
22	8.14	7.99	8.10	8.11	8.20	8.64	9.12	9.16	8.87	---	8.18	7.73
23	8.14	7.98	8.10	8.11	8.20	8.64	9.12	9.15	8.85	---	8.16	7.71
24	8.14	7.97	8.09	8.11	8.20	8.66	9.16	9.13	8.83	---	8.14	7.70
25	8.12	7.96	8.08	8.11	8.21	8.66	9.22	9.12	8.81	---	8.13	7.68
26	8.10	7.95	8.08	8.13	8.21	8.73	9.22	9.11	8.80	8.41	8.12	7.67
27	8.08	---	8.07	8.12	8.21	8.89	9.21	9.10	8.79	---	8.10	7.66
28	8.07	---	8.07	8.12	8.21	8.90	9.21	9.10	8.77	---	8.10	7.65
29	8.05	8.04	8.06	8.12	8.21	8.91	9.21	9.13	8.77	---	8.06	7.64
30	8.04	8.05	8.06	8.12	---	8.94	9.21	9.14	8.76	---	8.04	7.63
31	8.03	---	8.05	8.12	---	8.95	---	9.14	---	---	8.03	---
MEAN	8.18	---	8.07	8.09	8.13	8.56	9.05	9.17	8.95	---	---	7.81
MAX	8.35	---	8.10	8.13	8.21	8.95	9.22	9.23	9.13	---	---	8.03
MIN	8.03	---	8.04	8.05	8.07	8.22	8.94	9.10	8.76	---	---	7.63

STREAMS TRIBUTARY TO LAKE MICHIGAN

4355340875611 CEDAR LAKE SITE 1 NEAR KEIL, WI

LOCATION.--LAT 43°55'34", LONG 87°56'11", IN NE 1/4 SW 1/4 SEC.24, T.17N., R.21E., MANITOWOC COUNTY, HYDROLOGIC UNIT 04030101, IN NORTHEAST PART OF CEDAR LAKE, 1.1 MI (1.8 KM) SOUTHEAST OF LOUIS CORNERS, AND 5.0 MI (8.0 KM) NORTHEAST OF KEIL.

DRAINAGE AREA.--1.33 MI² (3.44 KM²), APPROXIMATELY.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--MAY 1974 TO CURRENT YEAR.

REMARKS.--EPILIMNION SAMPLED AT DEPTH OF 5 FT (1.5 M) BELOW LAKE SURFACE. HYPOLIMNION SAMPLED AT DEPTH OF 15 FT (4.6 M) BELOW LAKE SURFACE.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM
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EPILIMNION

DEC , 1975											
15...	1330	350	8.2	2.0	--	--	--	--	--	--	--
JAN , 1976											
29...	1130	350	7.6	1.0	--	--	--	--	--	--	--
AUG											
05...	1815	270	8.3	22.0	4	140	8	23	20	2.4	4

HYPOLIMNION

DEC , 1975											
15...	1400	350	8.3	2.0	--	--	--	--	--	--	--
AUG , 1976											
05...	1800	270	8.3	22.0	7	150	16	23	22	2.6	4

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED PHOSPHORUS (MG/L)	BICARBONATE (MG/L)	CARBONATE (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
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EPILIMNION

DEC , 1975											
15...	--	--	176	0	144	1.8	--	--	--	.1	--
JAN , 1976											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
05...	.1	1.4	161	0	132	1.3	6.3	6.2	.1	.8	160

HYPOLIMNION

DEC , 1975											
15...	--	--	175	0	144	1.4	--	--	--	.2	--
AUG , 1976											
05...	.1	1.5	161	0	132	1.3	6.5	5.5	.1	1.0	163

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)
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EPILIMNION

DEC , 1975											
15...	--	--	.02	.03	.13	.01	.01	.03	.03	.04	.08
JAN , 1976											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
05...	140	.22	--	.02	.09	--	.00	.00	--	.02	--

HYPOLIMNION

DEC , 1975											
15...	--	--	.05	.06	.27	.01	.01	.03	.06	.07	.09
AUG , 1976											
05...	142	.22	--	.04	.18	--	.01	.03	--	.05	--

4355340675611 CEDAR LAKE SITE 1 NEAR KEIL, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS-SOLVED AMMONIA NITROGEN (N) (MG/L)	DIS-SOLVED AMMONIA (NH4) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	DIS-SOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	SUS-PENDED KJEL NITROGEN (N) (MG/L)	DIS-SOLVED KJEL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	PHOSPHATE (PO4) (MG/L)
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EPILIMNION

DEC , 1975											
15...	.06	.08	.70	.48	.78	.24	.54	.81	3.6	.05	.15
JAN , 1976	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
AUG 05...	--	--	--	--	--	--	--	--	--	--	--

HYPOLIMNION

DEC , 1975											
15...	.11	.14	.63	.54	.72	.07	.65	.78	3.5	.02	.06
AUG , 1976	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--

DATE	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOSPHATE (PO4) (MG/L)	TOTAL HYDROLYZABLE PHOSPHORUS (P) (MG/L)	DIS-HYDROLYZABLE PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC PHOSPHORUS (P) (MG/L)	DIS-SOLVED ORGANIC PHOSPHORUS (P) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
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EPILIMNION

DEC , 1975										
15...	.15	.06	.06	.02	.02	.01	.02	--	--	9.8
JAN , 1976	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
AUG 05...	--	--	--	--	--	--	--	10	0	--

HYPOLIMNION

DEC , 1975										
15...	.06	.03	.03	.01	.01	.00	.01	--	--	9.1
AUG , 1976	--	--	--	--	--	--	--	10	0	--
05...	--	--	--	--	--	--	--	10	0	--

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Jan. 29, 1976	1130	CHRYSTOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Cyclotella</i>	10	100	
		TOTAL	10		
Aug. 5, 1976	1815	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Oocystis</i>	630	1	
		CHRYSTOPHYTA			
		Chrysophyceae			
		<i>Ochromonas</i>		0	
		CYANOPHYTA			
		Myxophyceae			
		<i>Anacystis</i>	40,000	59	
		<i>Anacystis incerta</i>	26,000	38	
<i>Oscillatoria</i>	1,000	2			
		TOTAL	68,000		

STREAMS TRIBUTARY TO LAKE MICHIGAN

4355270875627 CEDAR LAKE SITE 2 NEAR KEIL, WI

LOCATION.--LAT 43°55'27", LONG 87°56'27", IN SW 1/4 SW 1/4 SEC.24, T.17N., R.21E., MANITOWOC COUNTY, HYDROLOGIC UNIT 04030101, IN SOUTHWEST PART OF CEDAR LAKE, 1.0 MI (1.6 KM) SOUTHEAST OF LOUIS CORNERS, AND 4.9 MI (7.9 KM) NORTHEAST OF KEIL.

DRAINAGE AREA.--1.33 MI² (3.44 KM²), APPROXIMATELY.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--MAY 1974 TO CURRENT YEAR.

REMARKS.--EPILIMNION SAMPLED AT DEPTH OF 5 FT (1.5 M) BELOW LAKE SURFACE. HYPOLIMNION SAMPLED AT DEPTH OF 15 FT (4.6 M) BELOW LAKE SURFACE.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	OIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM
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EPILIMNION

DEC , 1975											
15...	1430	350	8.3	2.0	--	--	--	--	--	--	--
JAN , 1976											
29...	1110	350	7.6	1.0	--	--	--	--	--	--	--
AUG											
05...	1730	270	8.3	22.0	6	150	17	23	22	2.4	3

HYPOLIMNION

DEC , 1975											
15...	1500	360	8.2	2.0	--	--	--	--	--	--	--
AUG , 1976											
05...	1745	270	8.3	22.0	5	150	16	23	22	2.4	3

DATE	SODIUM AD-SORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	OIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
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EPILIMNION

DEC , 1975											
15...	--	--	174	0	143	1.4	--	--	--	.1	--
JAN , 1976											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
05...	.1	1.5	160	0	131	1.3	6.3	5.6	.1	.8	161

HYPOLIMNION

DEC , 1975											
15...	--	--	171	0	140	1.7	--	--	--	.1	--
AUG , 1976											
05...	.1	1.5	161	0	132	1.3	6.1	5.3	.1	.8	157

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)
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EPILIMNION

DEC , 1975											
15...	--	--	.02	.03	.13	.01	.01	.03	.03	.04	.07
JAN , 1976											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
05...	141	.22	--	.03	.13	--	.00	.00	--	.03	--

HYPOLIMNION

DEC , 1975											
15...	--	--	.02	.03	.13	.01	.01	.03	.03	.04	.07
AUG , 1976											
05...	141	.21	--	.04	.18	--	.00	.00	--	.04	--

4355270875627 CEDAR LAKE SITE 2 NEAR KEIL, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS-SOLVED AMMONIA NITROGEN (N) (MG/L)	DIS-SOLVED AMMONIA (NH4) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	DIS-SOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	SUSPENDED KJELDAHL NITROGEN (N) (MG/L)	DIS-SOLVED KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	PHOSPHATE (PO4) (MG/L)
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EPILIMNION

DEC , 1975 15...	.04	.05	.63	.62	.70	.04	.66	.73	3.2	.02	.06
JAN , 1976 29...	--	--	--	--	--	--	--	--	--	--	--
AUG 05...	--	--	--	--	--	--	--	--	--	--	--

HYPOLIMNION

DEC , 1975 15...	.04	.05	.60	.66	.67	.00	.70	.70	3.1	.02	.06
AUG , 1976 05...	--	--	--	--	--	--	--	--	--	--	--

DATE	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOSPHATE (PO4) (MG/L)	TOTAL HYDROLYZABLE PHOSPHORUS (P) (MG/L)	DIS-HYDROLYZABLE PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC PHOSPHORUS (P) (MG/L)	DIS-SOLVED ORGANIC PHOSPHORUS (P) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
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EPILIMNION

DEC , 1975 15...	.06	.04	.03	.02	.01	.00	.02	--	--	9.1
JAN , 1976 29...	--	--	--	--	--	--	--	--	--	--
AUG 05...	--	--	--	--	--	--	--	30	0	--

HYPOLIMNION

DEC , 1975 15...	.06	.06	.03	.01	.02	.00	.03	--	--	9.0
AUG , 1976 05...	--	--	--	--	--	--	--	30	0	--

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Jan. 29, 1976	1110	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		Cyclotella	9	100	
		CYANOPHYTA			
Aug. 5, 1976	1730	Myxophyceae			Grab sample
		Gomphosphaeria		0	
		TOTAL	9		
		CHLOROPHYTA			
		Chlorophyceae			
		Crucigenia	770	3	
		Tetraedron		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Cyclotella		0	
		CYANOPHYTA			
Myxophyceae					
Agmenellum	5,300	21			
Anabaena	1,600	6			
Anacystis	12,000	49			
Gomphosphaeria	4,600	19			
Oscillatoria	230	1			
EUGLENOPHYTA					
Cryptophyceae					
Cryptomonas		0			
TOTAL		25,000			

STREAMS TRIBUTARY TO LAKE MICHIGAN

04086000 SHEBOYGAN RIVER AT SHEBOYGAN, WI

LOCATION.--LAT 43°44'25", LONG 87°45'35", IN SE 1/4 NE 1/4 SEC.29, T.15 N., R.23 E., SHEBOYGAN COUNTY, HYDROLOGIC UNIT 04030101, ON LEFT BANK 400 FT (122 M) UPSTREAM FROM BRIDGE ON STATE HIGHWAY 141, NEAR WEST CITY LIMITS OF SHEBOYGAN, AND 4.2 MI (5.8 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--432 MI² (1,119 KM²).

PERIOD OF RECORD.--JUNE 1916 TO SEPTEMBER 1924 (PUBLISHED AS "NEAR SHEBOYGAN"), OCTOBER 1950 TO CURRENT YEAR. MONTHLY DISCHARGE ONLY FOR SOME PERIODS, PUBLISHED IN WSP 1307, 1727.

REVISED RECORDS.--WSP 1307: 1917(M), 1919(M), 1921(M), 1923(M), WSP 1557: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 584.00 FT (178.00 M) ABOVE MEAN SEA LEVEL. JUNE 1916 TO JUNE 1924, NONRECORDING GAGE AT SITE 0.7 MI (1.1 KM) DOWNSTREAM AT DIFFERENT DATUM. NOVEMBER 1950 TO JUNE 1951, NONRECORDING GAGE AT SITE 0.3 MI (0.5 KM) DOWNSTREAM AT DATUM 3.15 FT (0.96 M) LOWER.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR. DIURNAL FLUCTUATION CAUSED BY NUMEROUS POWERPLANTS ABOVE STATION.

AVERAGE DISCHARGE.--34 YEARS (1916-24, 1950-76), 237 FT³/S (6.712 M³/S), 7.45 IN/YR (189 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 7,660 FT³/S (217 M³/S) MAR. 22, 1975, GAGE HEIGHT, 11.64 FT (3.548 M); MINIMUM OBSERVED, ABOUT 1 FT³/S (0.028 M³/S) AUG. 27, 1922, GAGE HEIGHT, 1.48 FT (0.451 M) DATUM THEN IN USE, CAUSED BY SHUTDOWN OF POWERPLANTS.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 1,500 FT³/S (42.5 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)	DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)
MAR. 5	1900	1,760	49.8	MAR. 27	1400	*3,190	90.3
MAR. 12	2400	2,560	73.1	APR. 25	0400	2,280	64.6
							*7.99 2.435
							6.98 2.103

MINIMUM DISCHARGE, 26 FT³/S (0.74 M³/S) SEPT. 3, GAGE HEIGHT, 1.59 FT (0.485 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 14 TO FEB. 24.)

1.5	20	3.0	280
1.7	36	4.0	620
2.0	74	6.0	1,660
2.5	163	8.0	3,200

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	56	385	88	64	696	1310	680	187	59	102	50
2	64	59	268	66	64	526	1190	632	171	57	87	30
3	64	66	192	86	62	540	1080	576	159	52	63	27
4	64	67	187	84	62	588	950	515	141	44	77	29
5	60	70	169	82	62	1560	840	488	118	42	51	30
6	57	66	171	80	62	1400	768	488	110	37	50	29
7	52	66	151	78	62	1260	692	438	100	39	42	31
8	40	71	151	78	60	1060	600	385	92	50	48	31
9	38	81	141	76	60	800	480	346	87	45	45	39
10	46	89	99	76	62	708	421	316	81	42	44	37
11	40	95	147	74	64	756	428	255	74	37	59	33
12	46	94	143	74	68	1420	385	235	64	36	42	30
13	52	80	185	72	74	1790	367	217	52	34	44	29
14	57	80	272	72	86	1430	343	161	89	34	49	29
15	64	71	331	72	110	1200	355	157	107	36	36	32
16	66	68	257	72	220	985	480	316	89	39	36	35
17	66	71	135	72	240	716	456	376	77	37	63	36
18	60	71	120	70	280	744	459	313	73	51	37	35
19	56	74	110	70	310	860	438	260	77	44	38	35
20	55	84	100	70	300	1290	403	237	75	46	33	38
21	56	97	96	68	280	1410	452	225	60	48	31	40
22	56	110	94	68	260	1230	529	203	60	38	33	39
23	59	99	92	68	230	1160	556	181	61	37	35	38
24	59	89	90	66	300	1210	985	171	59	42	36	37
25	57	81	88	66	428	1170	2060	149	56	70	45	37
26	57	89	88	66	552	1170	1600	145	57	38	36	36
27	61	89	86	66	860	2650	1230	133	56	32	40	36
28	57	91	86	66	970	2030	920	129	49	60	37	38
29	57	155	86	64	880	1680	785	173	58	84	28	38
30	61	417	88	64	---	1480	728	194	55	89	34	38
31	59	---	88	64	---	1410	---	196	---	99	38	---
TOTAL	1749	2796	4696	2258	7132	36929	22290	9290	2586	1498	1439	1842
MEAN	56.4	93.2	151	72.8	246	1191	743	300	86.2	48.3	46.4	34.7
MAX	66	417	385	88	970	2650	2060	680	187	99	102	50
MIN	38	56	86	64	60	526	343	129	49	32	28	27
CFSM	.13	.22	.35	.17	.57	2.76	1.72	.69	.20	.11	.11	.08
IN.	.15	.24	.40	.19	.61	3.18	1.92	.80	.22	.13	.12	.09

CAL YR 1975 TOTAL 105423 MEAN 289 MAX 6850 MIN 29 CFSM .67 IN 9.08
WTR YR 1976 TOTAL 93705 MEAN 256 MAX 2650 MIN 27 CFSM .59 IN 8.07

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04086150 MILWAUKEE RIVER AT KEMASKUM, WI

LOCATION.--LAT 43°31'12", LONG 88°13'24", IN SE 1/4 SE 1/4 SEC.9, T.12 N., R.19 E., WASHINGTON COUNTY, HYDROLOGIC UNIT 04040003, ON LEFT BANK AT SMALL DAM IN KEMASKUM, 50 FT (15 M) ABOVE UNNAMED TRIBUTARY AND 2.6 MI (4.2 KM) ABOVE EAST BRANCH MILWAUKEE RIVER.

DRAINAGE AREA.--146 MI² (378 KN²).

PERIOD OF RECORD.--APRIL 1968 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 930 FT (283 M) FROM TOPOGRAPHIC MAP. PRIOR TO AUG. 21, 1973, NONRECORDING GAGE AT SAME SITE AND DATUM.

COOPERATION.--RECORDS GOOD EXCEPT THOSE FOR THE WINTER PERIOD, WHICH ARE FAIR. OCCASIONAL AFFECT FROM SMALL DAM 50 FT UPSTREAM

AVERAGE DISCHARGE.--8 YEARS, 88.6 FT³/S (2.509 M³/S), 8.24 IN/YR (209 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 3,040 FT³/S (86.1 M³/S) MAR. 22, 1975, GAGE HEIGHT, 9.15 FT (2.789 M); MINIMUM OBSERVED, 1.1 FT³/S (0.031 M³/S) AUG. 25-28, 1970, GAGE HEIGHT, 1.64 FT (0.500 M).

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 300 FT³/S (8.50 M³/S) AND MAXIMUM (#):

DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)	DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)	
MAR. 5	1500			ICE JAM	4.79	1.460	MAR. 27	1100	533	15.1	5.11	1.558
MAR. 14	1000	(A)*738	20.9		5.72	1.743	APR. 25	0600	698	19.8	5.61	1.710
MAR. 17	0800	646	18.3		5.46	1.664						

(A) EFFECT OF NATURAL RELEASE FROM DAM STORAGE.

MINIMUM DISCHARGE. 3.4 FT³/S (0.096 M³/S) SEPT. 16-18, GAGE HEIGHT, 1.82 FT (0.555 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (SHIFTING-CONTROL METHOD USED APR. 25 TO JULY 31; STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 16-27, DEC. 29 TO FEB. 17, FEB. 20-24.)

1.8	3.0	3.0	104
1.9	5.0	4.0	270
2.0	8.0	5.0	500
2.2	19	6.0	850
2.5	45		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	DCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	14	94	20	14	180	360	212	75	18	30	7.4
2	18	16	91	19	14	165	330	191	63	14	20	5.6
3	16	31	72	18	14	168	302	183	55	12	17	5.6
4	14	57	57	18	14	175	270	167	46	11	15	5.6
5	12	25	58	17	13	380	240	156	40	11	16	4.8
6	11	17	81	16	13	254	210	156	31	10	15	4.6
7	10	15	53	16	12	282	183	142	32	10	12	4.6
8	11	21	48	16	14	246	145	132	26	10	11	5.0
9	11	26	41	15	15	225	147	121	25	12	9.5	4.6
10	11	38	36	15	18	205	138	105	20	11	11	5.3
11	11	32	37	14	22	196	147	85	19	7.4	9.5	4.2
12	12	32	35	14	24	370	139	87	20	7.4	9.0	4.0
13	12	31	38	14	28	385	136	80	23	10	7.7	3.6
14	15	27	75	13	31	328	135	78	54	7.1	11	3.6
15	17	25	83	13	60	318	153	81	35	7.1	10	3.6
16	14	25	50	13	80	304	198	121	29	6.8	10	3.4
17	13	25	40	12	100	326	181	114	27	5.3	8.5	3.4
18	12	25	32	12	136	300	175	105	26	6.8	7.7	3.4
19	11	25	28	12	168	318	150	92	23	7.7	7.4	3.8
20	12	26	26	12	120	445	135	80	21	12	10	4.6
21	11	34	24	13	110	482	199	67	20	13	8.5	4.2
22	11	33	22	13	94	487	294	58	20	14	12	4.2
23	11	29	21	14	100	477	256	54	18	15	5.9	4.4
24	14	25	19	14	110	432	410	49	20	10	4.6	4.4
25	14	21	18	15	122	372	621	47	20	7.7	4.2	4.2
26	14	22	17	15	164	336	465	44	18	6.5	4.4	4.2
27	14	20	19	16	225	497	410	43	15	6.2	4.6	4.8
28	15	21	20	15	240	435	355	44	17	10	5.9	4.8
29	14	7.3	21	15	252	400	296	91	20	12	5.9	4.6
30	14	165	22	15	---	413	248	89	23	22	6.5	4.4
31	14	---	21	15	---	385	---	83	---	44	5.9	---
TOTAL	409	976	1299	459	2327	10286	7428	3157	881	357.0	315.7	134.9
MEAN	13.2	32.5	41.9	14.8	80.2	332	248	102	29.4	11.5	10.2	4.50
MAX	20	165	94	20	252	497	621	212	75	44	30	7.4
MIN	10	14	17	12	12	165	135	43	15	5.3	4.2	3.4
CFSM	.09	.22	.29	.10	.55	2.27	1.70	.70	.20	.08	.07	.03
IN.	.10	.25	.33	.12	.59	2.62	1.89	.80	.22	.09	.08	.03

CAL YR 1975 TOTAL 37972.0 MEAN 104 MAX 2810 MIN 9.0 CFSM .71 IN 9.68
WTR YR 1976 TOTAL 28029.6 MEAN 76.6 MAX 621 MIN 3.4 CFSM .52 IN 7.14

STREAMS TRIBUTARY TO LAKE MICHIGAN

04086200 EAST BRANCH MILWAUKEE RIVER AT NEW FANE, WI

LOCATION.--LAT 43°33'01", LONG 88°11'18", IN CENTER OF SEC.35, T.13 N., R.19 E., FOND DU LAC COUNTY, HYDROLOGIC UNIT 04040003, ON RIGHT BANK 150 FT (46 M) DOWNSTREAM OF BRIDGE ON COUNTY TRUNK HIGHWAY S, 0.4 MI (0.6 KM) SOUTHWEST OF NEW FANE, 0.5 MI (0.8 KM) DOWNSTREAM FROM RECREATION DAM (FORMERLY A MILL DAM), AND 6.0 MI (9.6 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--57.2 MI² (148 KM²).

PERIOD OF RECORD.--APRIL 1968 TO CURRENT YEAR.

REVISED RECORDS.--WRD WIS. 1971(M).

GAGE.--WATER-STAGE RECORDER. TEMPORARY NONRECORDING GAGE 0.4 MI (0.6 KM) UPSTREAM AT DIFFERENT DATUM JAN. 21, 1972, TO AUG. 2, 1973. ALTITUDE OF GAGE IS 950 FT (290 M) FROM TOPOGRAPHIC MAP. PRIOR TO JAN. 21, 1972, WATER-STAGE RECORDER AT SITE 200 FT (61 M) UPSTREAM AT SAME DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE POOR.

AVERAGE DISCHARGE.--8 YEARS, 31.0 FT³/S (0.878 M³/S), 7.36 IN/YR (187 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 743 FT³/S (21.0 M³/S) MAR. 24, 1975, GAGE HEIGHT, 5.44 FT (1.658 M); MAXIMUM GAGE HEIGHT, 5.93 FT (1.807 M) MAR. 5, 1974 (BACKWATER FROM ICE); MINIMUM DAILY, 0.76 FT³/S (0.022 M³/S) SEPT. 16, 1971.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 312 FT³/S (8.84 M³/S) MAR. 6, GAGE HEIGHT, 4.89 FT (1.491 M); MAXIMUM GAGE HEIGHT, 4.99 FT (1.521 M) FEB. 2 (BACKWATER FROM ICE); MINIMUM DAILY DISCHARGE, 5.4 FT³/S (0.15 M³/S) SEPT. 13.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 24-26, DEC. 16 TO FEB. 23.)

3.4	5.2	3.9	28
3.5	7.5	4.2	71
3.7	15	4.5	162

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	26	52	13	11	37	145	83	28	8.5	13	6.8
2	16	26	44	13	10	30	134	76	25	7.9	10	6.5
3	15	28	59	13	10	40	120	67	22	7.6	8.8	6.0
4	14	28	32	12	10	42	108	59	19	7.3	8.5	6.0
5	14	25	25	12	9.8	85	90	52	17	7.3	8.5	5.8
6	13	24	26	12	9.6	138	80	51	16	7.3	8.5	5.8
7	13	24	22	11	9.4	117	65	47	15	7.3	7.9	5.8
8	13	26	23	11	9.6	93	54	44	14	7.3	7.6	5.8
9	14	25	20	11	10	71	42	40	13	7.0	7.3	6.3
10	14	23	21	10	12	57	38	37	12	7.0	7.3	6.0
11	14	19	19	10	15	46	44	35	12	7.0	7.3	5.6
12	14	16	18	10	19	61	46	33	11	6.5	7.3	5.6
13	15	15	18	9.6	25	78	39	30	10	6.3	7.3	5.4
14	16	13	25	9.6	35	78	37	28	17	6.5	7.9	5.6
15	19	13	27	9.6	50	78	39	29	17	6.8	7.6	5.8
16	18	13	22	9.0	60	73	54	40	13	7.6	6.8	6.0
17	17	12	21	9.0	70	67	52	43	12	7.3	6.5	6.0
18	16	12	20	9.0	74	65	54	39	11	6.8	6.3	6.0
19	16	12	19	9.0	68	67	52	35	12	7.0	6.3	6.3
20	16	14	18	9.2	54	90	49	31	10	10	6.3	6.8
21	16	19	17	9.6	50	120	57	28	9.8	11	6.0	6.0
22	16	18	16	9.6	60	127	73	26	9.1	9.1	6.0	5.6
23	16	16	15	10	70	130	78	24	9.4	7.9	6.0	5.8
24	16	15	14	10	76	134	90	23	9.1	7.6	5.8	5.6
25	16	13	13	11	80	124	124	21	9.1	7.3	5.8	5.8
26	16	12	12	11	80	114	134	20	8.5	7.0	6.0	6.0
27	15	13	13	11	54	130	130	18	7.9	7.0	6.3	5.8
28	15	13	14	12	54	145	124	18	8.2	8.5	7.6	5.6
29	15	27	14	12	44	148	108	29	8.2	11	7.0	5.6
30	19	52	15	11	---	155	93	33	9.4	9.8	6.0	5.6
31	25	---	14	11	---	148	---	29	---	17	6.0	---
TOTAL	491	592	688	330.2	1139.4	2888	2353	1168	394.7	249.5	225.5	177.3
MEAN	15.8	19.7	22.2	10.7	39.3	93.2	78.4	37.7	13.2	8.05	7.27	5.91
MAX	25	52	59	13	80	155	145	83	28	17	13	6.8
MIN	13	12	12	9.0	9.4	30	37	18	7.9	6.3	5.8	5.4
CFSM	.28	.34	.39	.19	.69	1.63	1.37	.66	.23	.14	.13	.10
IN.	.32	.39	.45	.21	.74	1.88	1.53	.76	.26	.16	.15	.12
CAL YR 1975	TOTAL 14366.8	MEAN 39.4	MAX 646	MIN 6.5	CFSM .69	IN 9.34						
WTR YR 1976	TOTAL 10696.6	MEAN 29.2	MAX 155	MIN 5.4	CFSM .51	IN 6.96						

04086340 NORTH BRANCH MILWAUKEE RIVER NEAR FILLMORE, WI

LOCATION.--LAT 43°28'58", LONG 88°03'39", IN NW 1/4 SEC.25, T.12 N., R.20 E., WASHINGTON COUNTY, HYDROLOGIC UNIT 04040003, ON RIGHT BANK DOWNSTREAM FROM COUNTY TRUNK HIGHWAY M, 1.1 MI (1.8 KM) SOUTH OF FILLMORE AND 2.0 MI (3.2 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--153 MI² (396 KM²).

PERIOD OF RECORD.--APRIL 1968 TO CURRENT YEAR.

REVISED RECORDS.--WDR WIS: 1971(M).

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 800 FT (240 M) FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR.

AVERAGE DISCHARGE.--8 YEARS, 97.2 FT³/S (2.753 M³/S), 8.63 IN/YR (219 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 3,100 FT³/S (87.8 M³/S) MAR. 22, 1975, GAGE HEIGHT, 8.21 FT (2.502 M); MINIMUM DISCHARGE, 3.00 FT³/S (0.085 M³/S) AUG. 17, 18, 1970, GAGE HEIGHT, 0.19 FT (0.058 M).

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 300 FT³/S (8.50 M³/S) AND MAXIMUM (#):

DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)	DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)
FEB. 19	1200	330	9.35	4.42	1.347	MAR. 22	1000	329	9.32	4.39	1.338
MAR. 6	1700	534	15.1	5.21	1.588	MAR. 30	1000	346	9.80	4.56	1.390
MAR. 13	1600	570	16.3	5.30	1.615	APR. 25	0900	4614	17.4	45.41	1.649

MINIMUM DISCHARGE, 11 FT³/S (0.31 M³/S) SEPT. 14, GAGE HEIGHT, 0.57 FT (0.174 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 16 TO FEB. 25.)

OCT. 1 TO MAR. 5

MAR. 6 TO SEPT. 30

0.9	26	2.0	83	0.6	12	2.0	66
1.0	30	3.0	159	0.7	14	3.0	130
1.2	39	4.0	276	0.8	17	4.0	241
1.5	54	5.0	470	1.0	24	5.0	460
				1.5	42	6.0	890

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	33	149	42	33	218	291	200	111	39	50	17
2	33	34	163	41	33	214	259	172	99	28	37	17
3	32	39	172	40	33	222	228	158	85	27	31	16
4	31	50	126	39	32	244	200	145	71	27	27	14
5	30	47	110	38	30	432	174	134	59	22	30	13
6	29	40	109	37	29	491	153	139	50	21	26	17
7	27	43	93	36	28	454	136	131	45	21	23	15
8	27	57	98	36	29	418	121	120	40	23	24	13
9	29	61	78	35	31	365	108	108	35	21	23	16
10	31	73	68	34	35	311	99	95	29	20	18	19
11	30	72	67	34	40	282	107	87	30	18	23	17
12	28	65	62	33	45	325	107	80	33	15	23	17
13	28	61	66	32	58	509	105	74	29	18	22	15
14	31	55	94	32	68	505	101	71	51	19	20	12
15	39	46	108	31	90	470	102	70	63	18	22	14
16	43	42	90	31	130	463	145	112	55	20	22	16
17	40	44	70	30	200	433	147	120	45	21	20	17
18	38	44	60	30	250	301	133	122	42	19	22	18
19	37	43	52	30	320	266	124	119	38	19	19	21
20	36	45	48	30	300	271	112	104	36	21	18	18
21	36	55	45	31	280	293	125	89	29	25	17	17
22	36	59	44	31	230	309	170	76	27	24	14	18
23	36	55	43	32	200	303	176	66	32	24	15	20
24	36	50	41	32	180	275	230	58	31	23	15	18
25	37	48	40	33	200	246	562	55	31	21	17	16
26	36	52	38	34	223	223	495	47	29	18	19	17
27	33	56	38	35	262	289	430	44	25	16	16	24
28	34	47	40	35	292	342	355	45	25	21	17	17
29	36	73	42	36	279	337	286	83	27	26	17	13
30	34	150	43	35	---	342	237	105	38	40	17	16
31	32	---	45	34	---	325	---	116	---	70	17	---
TOTAL	1041	1639	2342	1059	3944	10478	6018	3145	1340	745	681	498
MEAN	33.6	54.6	75.5	34.2	136	336	201	101	44.7	24.0	22.0	16.6
MAX	43	150	172	42	320	509	562	200	111	70	50	24
MIN	27	33	38	30	28	214	99	44	25	15	14	12
CFSM	.22	.36	.49	.22	.89	2.21	1.31	.66	.29	.16	.14	.11
IN.	.25	.40	.57	.26	.96	2.55	1.46	.76	.33	.18	.17	.12
CAL YR 1975	TOTAL	39058	MEAN 107	MAX 2630	MIN 21	CFSM .70	IN 9.50					
WTR YR 1976	TOTAL	32930	MEAN 90.0	MAX 562	MIN 12	CFSM .59	IN 8.01					

STREAMS TRIBUTARY TO LAKE MICHIGAN

04086360 MILWAUKEE RIVER AT WAUBEKA, WI

LOCATION.--LAT 43°28'22", LONG 87°59'23", IN SE 1/4 SEC.28, T.12 N., R.21 E., OZAUKEE COUNTY, HYDROLOGIC UNIT 04040003, ON RIGHT BANK 100 FT (30 M) DOWNSTREAM FROM BRIDGE ON COUNTY TRUNK HIGHWAY I, 800 FT (240 M) DOWNSTREAM FROM RECREATION POND DAM AT WAUBEKA, AND 2.4 MI (3.9 KM) DOWNSTREAM FROM NORTH BRANCH MILWAUKEE RIVER.

DRAINAGE AREA.--428 MI² (1,110 KM²).

PERIOD OF RECORD.--MARCH 1968 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 770 FT (234 M), FROM TOPOGRAPHIC MAP. PRIOR TO AUG. 1, 1968, NONRECORDING GAGE AT SAME SITE AND DATUM.

REMARKS.--RECORDS FAIR.

AVERAGE DISCHARGE.--8 YEARS, 303 FT³/S (8.581 M³/S), 9.61 IN/YR (244 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 6,990 FT³/S (198 M³/S) MAR. 23, 1975, GAGE HEIGHT, 11.35 FT (3.459 M); MINIMUM, 19 FT³/S (0.54 M³/S) AUG. 18, 1970, GAGE HEIGHT, 1.90 FT (0.579 M).

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 1,000 FT³/S (28.3 M³/S) AND MAXIMUM (♯):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)		GAGE HEIGHT (FT) (M)		DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)		GAGE HEIGHT (FT) (M)	
FEB. 28	0400	1,070	30.3	5.44	1.658	MAR. 27	0800	1,280	36.3	5.84	1.780
MAR. 5	1800	1,520	43.0	6.23	1.900	APR. 25	1200	*2,420	68.6	*7.45	2.272
MAR. 14	0300	1,520	43.0	6.24	1.902						

MINIMUM DISCHARGE, 44 FT³/S (1.25 M³/S) JULY 12, 13, GAGE HEIGHT, 2.19 FT (0.668 M); MINIMUM GAGE HEIGHT, 2.18 FT (0.664 M) SEPT. 29, 30.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 24 TO FEB. 24.)

2.2	45	4.0	480
2.4	70	5.0	880
2.6	100	6.0	1,380
3.0	175	8.0	2,860
3.5	310		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	96	380	130	96	711	1100	767	318	108	139	53
2	92	100	500	130	96	715	1030	639	288	88	111	53
3	91	149	420	120	96	715	915	598	252	81	92	53
4	86	178	270	120	94	763	843	474	218	70	61	54
5	62	130	280	110	92	1420	668	524	185	62	70	54
6	76	120	250	110	98	1330	603	519	159	55	73	54
7	74	108	190	110	88	1270	631	462	147	54	70	54
8	71	143	170	110	88	1060	567	396	130	58	65	54
9	71	180	180	110	86	971	371	380	120	58	62	55
10	74	200	160	100	84	919	439	362	110	54	61	55
11	74	160	150	100	84	863	478	337	100	50	64	56
12	71	150	160	100	86	1030	480	244	98	45	70	56
13	70	140	150	98	92	1300	390	252	96	45	61	56
14	70	130	200	96	110	1420	380	257	140	48	61	56
15	74	120	270	94	140	1250	462	268	190	46	64	56
16	80	110	240	92	200	984	614	435	210	46	64	56
17	62	110	210	92	560	895	631	374	180	50	59	59
18	82	110	190	92	540	875	575	387	150	48	64	59
19	86	110	180	92	500	891	451	374	160	46	58	59
20	94	106	170	94	480	935	424	337	130	50	54	54
21	66	120	160	94	450	984	462	300	100	65	52	52
22	90	130	150	94	430	1120	676	265	94	68	48	51
23	90	120	140	96	420	1100	755	198	92	68	47	54
24	130	110	140	96	480	1080	1160	195	90	67	48	54
25	105	96	130	98	600	1030	2170	190	89	64	49	51
26	141	98	110	100	740	984	1600	176	85	55	53	51
27	120	110	120	100	951	1230	1520	165	74	53	49	54
28	110	120	130	100	996	1220	1230	161	70	59	51	55
29	100	170	130	98	655	1220	1010	249	77	70	52	48
30	94	250	140	96	---	1210	899	303	92	79	52	47
31	100	---	130	96	---	1160	---	328	---	110	52	---
TOTAL	2837	3990	6200	3168	9624	32655	23534	10936	4244	1928	1996	1623
MEAN	91.5	133	200	102	332	1053	784	353	141	62.2	64.4	54.1
MAX	185	250	500	130	996	1420	2170	767	318	118	139	59
MIN	70	96	110	92	84	711	371	161	70	45	47	47
CFSM	.21	.31	.47	.24	.78	2.46	1.83	.82	.33	.15	.15	.13
IN.	.25	.35	.54	.28	.84	2.84	2.05	.95	.37	.17	.17	.14
CAL YR 1975	TOTAL	124435	MEAN 341	MAX 6740	MIN 49	CFSM .80	IN 10.82					
WTR YR 1976	TOTAL	102735	MEAN 281	MAX 2170	MIN 45	CFSM .66	IN 8.93					

STREAMS TRIBUTARY TO LAKE MICHIGAN

04086500 CEDAR CREEK NEAR CEDARBURG, WI

LOCATION.--LAT 43°19'23", LONG 87°58'43", IN SE 1/4 SW 1/4 SEC.14, T.1U N., R.21 E., OZAUKEE COUNTY, HYDROLOGIC UNIT 04040003, ON LEFT BANK 40 FT (12 M) UPSTREAM FROM BRIDGE ON STATE HIGHWAY 60, 1.9 MI (3.1 KM) NORTH OF CEDARBURG AND 6.6 MI (10.6 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--121 MI² (313 KM²).

PERIOD OF RECORD.--AUGUST 1930 TO SEPTEMBER 1970. JULY 1973 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1307: 1932-34(M), 1937(M), 1939(M), 1945(M), 1948-49(M). WSP 1627: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 795.33 FT (242.42 M) ABOVE MEAN SEA LEVEL (LEVELS BY CORPS OF ENGINEERS). NONRECORDING GAGE AND CREST-STAGE GAGE AUGUST 1930 TO SEPTEMBER 1970 AT SAME SITE AND DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

AVERAGE DISCHARGE.--43 YEARS, 66.1 FT³/S (1.872 M³/S), 7.42 IN/YR (189 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE OBSERVED, ABOUT 3,600 FT³/S (102 M³/S) MAR. 30, 1960, GAGE HEIGHT, 12.25 FT (3.734 M), FROM GRAPH BASED ON GAGE READINGS, BACKWATER FROM ICE; MINIMUM OBSERVED, 0.20 FT³/S (0.006 M³/S) AUG. 9-12, 1936.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 400 FT³/S (11.3 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)	DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)
FEB. 28	0330	ICE JAN	7.92 2.414	MAR. 28	2000	618 17.5	7.49 2.283
MAR. 6	0330	1,660 47.0	9.27 2.825	APR. 26	0430	*1,760 49.8	*9.53 2.905
MAR. 14	0300	1,120 31.7	8.43 2.569				

MINIMUM DISCHARGE, 0.4 FT³/S (0.238 M³/S) AUG. 25, GAGE HEIGHT, 5.07 FT (1.545 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (SHIFTING-CONTROL METHOD USED MAR. 6 TO JUNE 24; STAGE-DISCHARGE RELATION AFFECTED BY ICE JAN. 30 TO FEB. 24.)

5.2	15	6.5	285
5.4	30	7.0	480
5.6	56	8.0	940
5.9	117	9.0	1,500
6.2	195	10.0	2,120

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	23	246	38	30	270	338	240	90	33	40	11
2	22	24	146	36	30	240	243	181	79	25	30	11
3	21	32	119	35	30	353	181	152	63	21	22	12
4	20	42	88	34	29	528	139	126	56	19	17	12
5	20	41	68	33	29	1240	113	110	50	18	15	10
6	20	38	75	33	28	1540	97	110	46	17	14	9.6
7	20	36	72	33	27	1430	86	113	42	16	14	9.5
8	20	36	63	33	27	1060	72	97	38	16	13	9.8
9	20	36	58	32	27	733	68	88	32	20	13	11
10	20	61	58	30	27	588	63	77	30	18	13	12
11	19	68	55	30	27	504	68	77	29	14	13	12
12	19	56	60	29	29	645	70	74	28	13	13	11
13	19	49	56	29	29	933	63	70	27	17	12	10
14	19	45	139	28	33	1080	61	66	45	15	11	10
15	20	42	178	28	40	894	64	70	63	14	13	10
16	22	39	100	27	52	663	184	192	48	12	13	11
17	22	38	66	27	80	488	157	192	42	10	12	11
18	22	38	60	27	120	325	136	126	41	12	12	12
19	22	37	52	27	150	280	115	97	43	14	12	11
20	22	37	47	28	160	317	90	79	37	19	11	12
21	22	41	45	29	170	331	108	70	32	21	12	14
22	23	42	42	29	160	270	270	61	32	23	11	12
23	24	39	40	29	150	201	258	60	29	27	9.7	12
24	24	37	39	30	140	165	553	58	33	20	8.9	12
25	24	31	38	30	210	136	1340	53	35	15	8.9	11
26	23	32	35	30	300	126	1620	50	29	14	9.8	12
27	23	36	37	31	430	460	1150	48	25	13	9.8	12
28	23	37	38	32	480	596	790	46	27	19	11	13
29	23	61	39	32	390	562	532	82	30	25	12	13
30	23	258	40	31	---	464	353	106	37	38	11	13
31	23	---	39	31	---	397	---	97	---	40	11	---
TOTAL	666	1432	2238	951	3433	17829	9382	3068	1238	61	428.1	341.9
MEAN	21.5	47.7	72.2	30.7	118	575	313	99.0	41.3	19.9	13.8	11.4
MAX	24	258	246	38	480	1540	1620	240	90	60	40	14
MIN	19	23	35	27	27	126	61	46	25	10	8.9	9.5
CFSM	.18	.39	.60	.25	.98	4.75	2.59	.82	.34	.16	.11	.09
IN.	.20	.44	.69	.29	1.06	5.48	2.88	.94	.38	.19	.13	.11
CAL YR 1975 TOTAL	42100.0		MEAN 115	MAX 2100	MIN 19	CFSM .95	IN 12.94					
WTR YR 1976 TOTAL	41625.0		MEAN 114	MAX 1628	MIN 8.9	CFSM .94	IN 12.80					

STREAMS TRIBUTARY TO LAKE MICHIGAN

04097000 MILWAUKEE RIVER AT MILWAUKEE, WI
(NATIONAL STREAM-QUALITY ACCOUNTING NETWORK STATION)

LOCATION.--LAT 43°06'00", LONG 87°54'32", IN NE 1/4 SEC.S, T.7 N., R.22 E., MILWAUKEE COUNTY, HYDROLOGIC UNIT 04040003, ON LEFT BANK NEAR NORTHEAST LIMITS OF MILWAUKEE IN ESTABROOK PARK, 2,000 FT (600 M) DOWNSTREAM FROM PORT WASHINGTON ROAD BRIDGE AND 6.6 MI (10.6 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--686 MI² (1,777 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--APRIL 1914 TO CURRENT YEAR. PUBLISHED AS "NEAR MILWAUKEE" PRIOR TO 1936.

REVISED RECORDS.--WSP 564: 1918(M). WSP 924: 1940. WSP 1207: 1936(M). WSP 1337: 1915-17(M), 1918, 1919-21(M), 1922, 1923(M), 1924, 1925-33(M). WSP 1557: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 607.23 FT (185.084 M) ABOVE MEAN SEA LEVEL (LEVELS BY CORPS OF ENGINEERS). PRIOR TO APR. 6, 1929, NONRECORDING GAGE NEAR PRESENT SITE AT DIFFERENT DATUM. APR. 6, 1929, TO JAN. 8, 1934, NONRECORDING GAGE AT BRIDGE 0.5 MI (0.8 KM) UPSTREAM AT DIFFERENT DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, OR THOSE FOR PERIOD OF MISSING RECORD NOV. 11 TO JAN. 16, WHICH ARE FAIR. OCCASIONAL REGULATION CAUSED BY RECREATION DAM APPROXIMATELY 600 FT (180 M) UPSTREAM.

AVERAGE DISCHARGE.--62 YEARS, 399 FT³/S (11.3 M³/S), 7.90 IN/YR (200 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 15,100 FT³/S (428 M³/S) MAR. 20, 1918, AUG. 6, 1924, GAGE HEIGHT, 9.00 FT (2.743 M) DATUM THEN IN USE, FROM FLOODMARK FOR 1916, FROM GRAPH BASED ON GAGE READING FOR 1924, NO FLOW SEPT. 8, 1943.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 2,000 FT³/S (56.6 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)	DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)
MAR. 4	2145	*6,050	171	*6.59	2.009	APR. 24	0015	4,710	133	5.90	1.798
MAR. 27	0130	3,400	96.3	5.14	1.567						

MINIMUM DISCHARGE, 31 FT³/S (0.88 M³/S) MAY 4, GAGE HEIGHT, 1.73 FT (0.527 M), RESULT OF REGULATION.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE JAN. 16 TO FEB. 24.)

1.7	26	3.0	700
1.8	43	4.0	1,750
1.9	70	5.0	3,180
2.2	190	6.0	4,900
2.5	345		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	125	77	800	160	130	1370	1570	1190	541	149	159	97
2	129	205	600	170	130	1380	1440	968	501	167	189	76
3	125	424	500	160	120	1610	1300	838	448	147	156	73
4	125	197	450	160	120	2710	1100	533	404	125	139	67
5	117	239	420	160	120	4210	987	897	369	114	156	63
6	113	177	390	150	120	2710	812	801	337	108	124	58
7	109	133	370	150	110	2500	794	705	314	104	110	56
8	106	171	340	150	110	2110	715	630	297	102	106	58
9	106	206	310	140	120	1890	620	553	260	100	106	212
10	106	396	290	140	120	1610	533	589	251	96	107	73
11	106	310	270	140	130	1470	599	535	237	89	107	66
12	106	200	260	130	140	1630	579	489	218	83	108	63
13	106	160	260	130	150	2580	517	417	195	78	112	62
14	137	130	350	130	170	2360	494	427	313	78	132	63
15	146	140	640	120	250	2250	515	717	261	78	95	60
16	117	170	500	120	600	1860	766	733	292	78	92	58
17	125	160	370	120	400	1410	899	850	245	72	97	61
18	125	150	320	120	480	1320	779	688	341	69	93	64
19	117	160	280	120	450	1210	689	632	203	75	90	103
20	113	170	250	120	430	1270	589	578	182	77	89	90
21	121	160	230	130	760	1330	665	530	164	80	78	79
22	117	150	210	130	780	1340	744	450	155	87	70	73
23	117	130	200	130	760	1350	968	430	148	101	70	70
24	121	120	190	130	880	1300	2380	400	153	98	67	68
25	113	110	180	140	904	1260	4170	380	152	91	68	70
26	186	100	160	140	1100	1310	3780	372	146	87	98	68
27	200	100	170	140	1530	2620	2870	357	138	85	69	68
28	146	110	180	140	1620	2110	2270	397	137	129	212	70
29	117	300	190	140	1690	1850	1760	495	126	95	80	75
30	91	1000	280	140	---	1860	1420	527	136	306	74	76
31	80	---	190	130	---	1710	---	552	---	535	72	---
TOTAL	3766	6255	10070	4300	14174	57700	37324	18660	7684	3683	3325	2242
MEAN	122	209	325	139	469	1661	1244	602	256	119	107	74.7
MAX	200	1000	800	180	1620	4210	4170	1190	541	535	212	212
MIN	80	77	160	120	110	1210	494	357	126	69	67	56
CFSM	.18	.30	.47	.20	.71	2.71	1.81	.88	.37	.17	.16	.11
IN.	.20	.34	.55	.23	.77	3.13	2.02	1.01	.42	.20	.18	.12

CAL YR 1975 TOTAL 186812 MEAN 512 MAX 8010 MIN 77 CFSM .75 IN 10.13
WTR YR 1976 TOTAL 169185 MEAN 462 MAX 4210 MIN 56 CFSM .67 IN 9.17

04067000 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUED
(NATIONAL STREAM-QUALITY ACCOUNTING NETWORK STATION)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1964-65, 1967-69, 1971, 1973 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: JULY 1973 TO CURRENT YEAR.

WATER TEMPERATURES: JULY 1973 TO CURRENT YEAR.

INSTRUMENTATION.--WATER QUALITY MONITOR SINCE JULY 20, 1973.

REMARKS.--SPECIFIC CONDUCTANCE RECORDER INOPERATIVE PART OF THE YEAR. PARTIAL RECORDS OF DAILY SPECIFIC CONDUCTANCE AND WATER TEMPERATURES FOR WATER YEARS 1973-75 AVAILABLE IN FILES OF DISTRICT OFFICE.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: MAXIMUM OBSERVED, 1,050 MICROMHOS DEC. 12; MINIMUM OBSERVED, 310 MICROMHOS AUG. 31.
WATER TEMPERATURES: MAXIMUM, 30.5°C JULY 11; MINIMUM, 0.0°C ON MANY DAYS DURING WINTER PERIOD.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT , 1975										
23...	1415	106	690	6.5	14.5	4	--	--	54	826
NOV										
20...	1130	170	700	6.4	6.0	10	--	--	94	400
DEC										
17...	1445	370	760	8.2	.0	10	--	--	13000	6000
JAN , 1976										
14...	1400	130	930	7.5	.0	1	--	--	150	40
FEB										
11...	1130	130	1300	5.7	.0	1	--	--	870	8180
MAR										
08...	1330	1950	520	6.0	1.0	6	--	--	828000	8600
APR										
13...	1130	512	620	7.5	9.5	4	--	--	4800	1900
MAY										
11...	1200	535	660	7.8	16.0	4	--	--	76000	17000
JUN										
06...	1030	301	650	6.6	21.5	10	--	--	100	812
JUL										
21...	1145	80	670	8.5	24.0	4	--	--	40	35
AUG										
10...	1015	105	560	6.7	22.0	8	--	--	96	150
SEP										
13...	1130	62	590	8.8	20.0	3	9.1	105	100	56

DATE	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DISSOLVED PHOSPHATE (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
OCT , 1975										
23...	320	45	65	39	32	18	.8	3.2	324	7
NOV										
20...	330	65	68	36	24	14	.6	3.2	318	0
DEC										
17...	380	99	72	46	8.8	5	.2	3.3	339	0
JAN , 1976										
14...	430	95	84	54	51	20	1.1	3.3	411	0
FEB										
11...	340	59	74	38	150	49	3.5	3.5	344	0
MAR										
08...	210	52	48	23	16	14	.5	2.6	198	0
APR										
13...	300	57	65	33	17	11	.4	2.6	294	0
MAY										
11...	290	49	68	34	21	13	.5	2.0	300	0
JUN										
06...	310	49	62	36	22	13	.5	2.2	320	0
JUL										
21...	270	43	54	34	36	22	.9	2.7	263	0
AUG										
10...	240	43	42	34	32	22	.9	2.9	246	0
SEP										
13...	220	51	40	30	36	26	1.0	2.6	210	0

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	ALKA-LINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
OCT , 1975										
23...	277	1.7	44	52	.5	.7	404	403	.55	116
NOV										
20...	261	2.0	48	44	.2	5.6	397	388	.54	182
DEC										
17...	278	3.4	63	54	.2	9.5	473	426	.64	473
JAN , 1976										
14...	337	21	59	89	.2	11	572	554	.78	201
FEB										
11...	282	1100	53	250	.2	12	791	750	1.08	278
MAR										
08...	162	3.2	39	35	.3	7.5	288	269	.39	1520
APR										
13...	241	15	45	33	.1	3.0	374	344	.51	517
MAY										
11...	246	7.6	37	40	.1	.8	379	345	.52	547
JUN										
08...	262	1.3	35	38	.2	.6	421	356	.57	342
JUL										
21...	232	1.4	50	61	.3	4.8	423	382	.58	91.4
AUG										
10...	202	.8	44	55	.2	.7	352	332	.48	99.8
SEP										
13...	172	.5	39	59	.3	1.0	393	311	.53	65.8

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PERI-PHYTON BIOMASS ASH WEIGHT (G/SQ M)	PERI-PHYTON BIOMASS DRY WEIGHT (G/SQ M)	UNCORRECTED PERI-PHYTON CHLORO-PHYLL B (MG/SQ M)	UNCORRECTED PERI-PHYTON CHLORO-PHYLL A (MG/SQ M)
OCT , 1975										
23...	.25	.67	.92	4.1	.13	8.6	2.30	3.60	.30	3.9
NOV										
20...	1.1	.78	1.9	8.3	.16	--	--	--	--	--
DEC										
17...	1.9	.99	2.9	13	.19	--	--	--	--	--
JAN , 1976										
14...	2.3	1.3	3.6	16	.21	5.9	1.30	1.50	.00	.60
FEB										
11...	2.1	1.3	3.4	15	.39	--	--	--	--	--
MAR										
08...	2.0	.89	2.9	13	.15	--	--	--	--	--
APR										
13...	.82	.85	1.7	7.4	.11	22	--	--	--	--
MAY										
11...	.56	1.0	1.6	6.9	.14	--	--	--	--	--
JUN										
08...	.03	1.3	1.3	5.9	.12	--	22.5	29.0	8.2	58
JUL										
21...	.01	1.1	1.1	4.9	.19	13	4.46	7.92	1.3	11
AUG										
10...	.03	1.1	1.1	5.0	.16	--	--	--	--	--
SEP										
13...	.02	1.1	1.1	5.0	.15	--	--	--	--	--

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDED ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT , 1975												
23...	1415	106	3	0	3	0	0	0	<10	<10	0	0
JAN , 1976												
14...	1400	130	4	0	4	1	0	1	<10	0	<10	0
APR												
13...	1130	512	1	1	0	0	0	0	<20	10	<10	0
JUL												
21...	1145	80	11	7	4	1	1	0	<10	0	<10	1

DATE	SUS- PENDED COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDED COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS- PENDED LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)
OCT , 1975											
23...	0	0	7	7	0	420	20	7	5	2	30
JAN , 1976											
14...	0	0	10	0	10	120	30	6	4	2	20
APR											
13...	0	0	0	0	0	360	40	5	3	2	40
JUL											
21...	0	1	0	0	0	270	10	8	6	2	60

DATE	SUS- PENDED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS- PENDED MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDED SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDED ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT , 1975											
23...	30	0	<.5	.0	<.5	0	0	0	30	20	10
JAN , 1976											
14...	0	20	<.5	.0	<.5	0	0	0	20	10	10
APR											
13...	20	20	<.5	.0	<.5	0	0	0	10	0	10
JUL											
21...	60	0	<.5	.0	<.5	2	2	0	10	10	0

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct. 23, 1975	1415	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		Ankistrodesmus	1,100	14	
		Chlamydomonas	86	1	
		Crucigenia		0	
		Kirchneriella	950	12	
		Pediastrum		0	
		Scenedesmus	2,600	33	
		Tetraedron		0	
		Tetrastrum		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Cocconeis		0	
		Cyclotella	2,600	33	
		Cymbella		0	
		Diatoma		0	
		Gomphonema		0	
		Melosira		0	
		Navicula	170	2	
		Nitzschia	340	4	
		Rhoicosphenia		0	
		Surirella		0	
		CYANOPHYTA			
		Myxophyceae			
		Anacystis		0	
		Oscillatoria		0	
		EUGLENOPHYTA			
		Cryptophyceae			
		Cryptomonas	86	1	
		Euglenophyceae			
		Euglena		0	
		Phacus		0	
		TOTAL	7,900		

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Nov. 20, 1975	1130	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	55	2	
		<i>Scenedesmus</i>	380	12	
		<i>Tetrastrum</i>		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Caloneis</i>	27	1	
		<i>Cocconeis</i>	83	3	
		<i>Cyclotella</i>	410	13	
		<i>Cymbella</i>	27	1	
		<i>Diatoma</i>		0	
		<i>Gomphonema</i>	27	1	
		<i>Melosira</i>	250	8	
		<i>Navicula</i>	470	14	
		<i>Nitzschia</i>	690	21	
		<i>Pinnularia</i>	27	1	
		<i>Rhoicosphenia</i>	55	2	
		<i>Surirella</i>	27	1	
		CYANOPHYTA			
		Myxophyceae			
		<i>Oscillatoria</i>	270	8	
		<i>Phormidium</i>	500	15	
EUGLENOPHYTA					
Euglenophyceae					
<i>Euglena</i>		0			
TOTAL		3,300			
Dec. 17, 1975	1445	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Pediastrum</i>		0	
		<i>Phacotus</i>		0	
		<i>Scenedesmus</i>	520	21	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>		0	
		<i>Amphora</i>		0	
		<i>Cocconeis</i>		0	
		<i>Cyclotella</i>	65	3	
		<i>Cymbella</i>		0	
		<i>Diatoma</i>	65	3	
		<i>Fragilaria</i>		0	
		<i>Gomphonema</i>	130	5	
		<i>Melosira</i>	65	3	
		<i>Neridion</i>		0	
		<i>Navicula</i>	1,200	50	
		<i>Nitzschia</i>	330	13	
		<i>Rhoicosphenia</i>	65	3	
		<i>Surirella</i>		0	
		<i>Synedra</i>		0	
		CYANOPHYTA			
Myxophyceae					
<i>Oscillatoria</i>		0			
TOTAL		2,500			
Jan. 14, 1976	1400	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	26	5	
		<i>Chlamydomonas</i>		0	
		<i>Scenedesmus</i>		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	26	5	
		<i>Amphora</i>		0	
		<i>Cocconeis</i>	26	5	
		<i>Cyclotella</i>		0	
		<i>Diatoma</i>	26	5	
		<i>Gomphonema</i>	52	9	
		<i>Melosira</i>		0	
		<i>Navicula</i>	310	55	
		<i>Nitzschia</i>	78	14	
		<i>Rhoicosphenia</i>		0	
<i>Synedra</i>	26	5			
CYANOPHYTA					
Myxophyceae					
<i>Oscillatoria</i>		0			
TOTAL		570			

04067000 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method			
Feb. 11, 1976	1130	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		<i>Chlamydomonas</i>	13	1				
		<i>Scenedesmus</i>	53	5				
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Cocconeis</i>	13	1				
		<i>Cyclotella</i>	92	9				
		<i>Diatoma</i>	13	1				
		<i>Gomphonema</i>	13	1				
		<i>Melosira</i>	26	3				
		<i>Navicula</i>	220	22				
		<i>Nitzschia</i>	110	11				
		<i>Rhoicosphenia</i>		0				
		<i>Surirella</i>	66	7				
		<i>Synedra</i>	13	1				
		CYANOPHYTA						
		Myxophyceae						
		<i>Oscillatoria</i>	370	37				
		TOTAL	1,000					
Mar. 8, 1976	1330	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		<i>Scenedesmus</i>		0				
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Asterionella</i>		0				
		<i>Caloneis</i>		0				
		<i>Cocconeis</i>	63	4				
		<i>Cyclotella</i>	250	15				
		<i>Cymatopleura</i>		0				
		<i>Diatoma</i>		0				
		<i>Gomphonema</i>		0				
		<i>Melosira</i>		0				
		<i>Navicula</i>	820	48				
		<i>Nitzschia</i>	440	26				
		<i>Rhoicosphenia</i>		0				
		<i>Synedra</i>	63	4				
		CYANOPHYTA						
		Myxophyceae						
		<i>Oscillatoria</i>		0				
EUGLENOPHYTA								
Cryptophyceae								
<i>Cryptomonas</i>	63	4						
TOTAL	1,700							
Apr. 13, 1976	1130	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		<i>Chlamydomonas</i>	330	4				
		<i>Scenedesmus</i>	330	4				
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Cyclotella</i>	5,400	63				
		<i>Cymbella</i>	170	2				
		<i>Gomphonema</i>	170	2				
		<i>Navicula</i>	1,300	16				
		<i>Nitzschia</i>	500	6				
		<i>Surirella</i>	170	2				
		EUGLENOPHYTA						
		Cryptophyceae						
		<i>Cryptomonas</i>	170	2				
		TOTAL	8,500					
		May 11, 1976	1200	CHLOROPHYTA				Grab sample
				Chlorophyceae				
				<i>Ankistrodesmus</i>		580	6	
				CHRYSOPHYTA				
Bacillariophyceae								
<i>Cocconeis</i>				0				
<i>Cyclotella</i>	7,300			78				
<i>Gomphonema</i>	190			2				
<i>Navicula</i>	190			2				
<i>Nitzschia</i>	970			10				
EUGLENOPHYTA								
Cryptophyceae								
<i>Cryptomonas</i>	190			2				
TOTAL	9,500							

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087800 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method	
June 8, 1976	1030	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Ankistrodesmus</i>	3,100	9		
		<i>Carteria</i>	330	1		
		<i>Chodatella</i>		0		
		<i>Coelastrum</i>		0		
		<i>Crucigenia</i>		0		
		<i>Elakatothrix</i>	330	1		
		<i>Micractinium</i>	4,600	13		
		<i>Oocystis</i>	660	2		
		<i>Pediastrum</i>	5,300	15		
		<i>Scenedesmus</i>	3,600	10		
		<i>Selenastrum</i>	330	1		
		<i>Sphaerocystis</i>		0		
		<i>Tetrastrum</i>	330	1		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Caloneis</i>		0		
		<i>Cocconeis</i>		0		
		<i>Cyclotella</i>	10,000	28		
		<i>Navicula</i>	330	1		
		<i>Nitzschia</i>	330	1		
		<i>Surirella</i>		0		
		Chrysophyceae				
		<i>Ochromonas</i>				
		CYANOPHYTA				
		Myxophyceae				
		<i>Anacystis</i>	5,300	15		
		EUGLENOPHYTA				
		Cryptophyceae				
		<i>Cryptomonas</i>	330	1		
		Euglenophyceae				
		<i>Trachelomonas</i>		0		
PYRRHOPHYTA						
Dinophyceae						
<i>Gymnodinium</i>		0				
TOTAL		36,000				
July 21, 1976	1145	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Ankistrodesmus</i>	830	3		
		<i>Chlamydomonas</i>	210	1		
		<i>Chodatella</i>		0		
		<i>Coelastrum</i>	1,200	5		
		<i>Dictyosphaerium</i>	830	3		
		<i>Pediastrum</i>	2,100	8		
		<i>Phacotus</i>		0		
		<i>Pteromonas</i>		0		
		<i>Scenedesmus</i>	9,600	37		
		<i>Selenastrum</i>	1,200	5		
		<i>Tetraedron</i>	410	2		
		<i>Tetrastrum</i>	830	3		
		<i>Treubaria</i>		0		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Cyclotella</i>	760	3		
		<i>Melosira</i>	1,400	6		
		<i>Navicula</i>	140	1		
		<i>Rhicosphenia</i>		0		
		<i>Synedra</i>		0		
		CYANOPHYTA				
		Myxophyceae				
		<i>Aemoneillum</i>	3,900	15		
		<i>Anacystis</i>	690	3		
		EUGLENOPHYTA				
		Cryptophyceae				
		<i>Cryptomonas</i>	280	1		
		Euglenophyceae				
		<i>Euglena</i>		0		
		<i>Phacus</i>		0		
		<i>Trachelomonas</i>	410	2		
PYRRHOPHYTA						
Dinophyceae						
<i>Peridinium</i>	340	1				
TOTAL		26,000				

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent composition	Sampling method	
Aug. 10, 1976	1015	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Actinastrum</i>	2,800	7		
		<i>Ankistrodesmus</i>	4,300	11		
		<i>Chlamydomonas</i>	710	2		
		<i>Chodatella</i>	360	1		
		<i>Crucigenia</i>	2,800	7		
		<i>Kirchneriella</i>	2,800	7		
		<i>Oocystis</i>	1,400	4		
		<i>Pediastrum</i>	4,600	12		
		<i>Scenedesmus</i>	8,900	22		
		<i>Tetraedron</i>	1,100	3		
		<i>Treubaria</i>	1,100	3		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Cyclotella</i>	5,700	14		
		<i>Neiosira</i>	360	1		
		<i>Nitzschia</i>	1,800	4		
		EUGLENOPHYTA				
		Euglenophyceae				
		<i>Euglena</i>	360	1		
		PYRRHOPHYTA				
		Dinophyceae				
<i>Glenodinium</i>	710	2				
TOTAL		40,000				
Sept. 13, 1976	1130	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Actinastrum</i>	1,700	3		
		<i>Ankistrodesmus</i>	4,400	7		
		<i>Chlamydomonas</i>	870	1		
		<i>Crucigenia</i>	3,500	5		
		<i>Microactinium</i>	26,000	41		
		<i>Oocystis</i>	440	1		
		<i>Scenedesmus</i>	10,000	16		
		<i>Treubaria</i>	870	1		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Cyclotella</i>	5,200	8		
		<i>Navicula</i>	440	1		
		<i>Nitzschia</i>	1,300	2		
		CYANOPHYTA				
		Myxophyceae				
		<i>Agnellum</i>	7,000	11		
		EUGLENOPHYTA				
		Euglenophyceae				
		<i>Euglena</i>	870	1		
		<i>Lepocinlis</i>	440	1		
		TOTAL		64,000		

STREAMS TRIBUTARY TO LAKE MICHIGAN
040R7000 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Dec. 17, 1975	1300	0.0	-	760	May 25, 1976	1100	16.5	305	640
Jan. 30, 1976	1305	0.0	137	920	June 28, 1976	1210	23.0	138	625
Mar. 8, 1976	1330	1.0	-	520	July 7, 1976	1015	22.0	101	650
Apr. 5, 1976	1530	11.5	996	620	July 21, 1976	1145	24.0	-	670
May 22, 1976	1010	22.0	-	660	Aug. 25, 1976	1310	24.0	64.1	650

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT , 1975						
23...	1415	14.5	106	8	2.3	--
NOV						
20...	1130	8.0	170	24	11	86
DEC						
17...	1445	.0	370	12	12	0
JAN , 1976						
14...	1400	.0	130	33	12	20
FEB						
11...	1130	.0	130	10	3.5	57
MAR						
08...	1330	1.0	1950	37	195	70
APR						
13...	1130	9.5	512	11	15	100
MAY						
11...	1200	16.0	535	12	17	95
JUN						
08...	1030	21.5	301	20	16	100
JUL						
21...	1145	24.0	80	16	3.5	75
AUG						
10...	1015	22.0	105	16	4.5	81
SEP						
13...	1130	20.0	62	13	2.2	76

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUED

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	730	690	630	600	870	820				
2	---	---	730	580	650	620	---	810				
3	690	620	690	530	700	640	930	870				
4	710	690	720	690	700	670	870	860				
5	710	700	700	660	680	660	880	830				
6	720	710	670	660	680	660	860	820				
7	730	720	700	600	680	670	860	600				
8	730	720	790	670	790	670	---	---				
9	730	710	760	700	860	740	---	---				
10	730	710	700	620	770	710	---	---				
11	710	690	700	680	930	720	---	---				
12	730	710	700	680	1050	860	---	---				
13	730	720	700	670	990	840	---	---				
14	730	610	720	700	960	770	---	---				
15	700	650	730	700	770	720	---	---				
16	670	640	720	690	730	710	---	---				
17	690	670	730	710	800	710	---	---				
18	690	670	760	730	880	800	---	---				
19	710	660	740	700	860	800	---	---				
20	700	690	730	540	1010	840	---	---				
21	710	690	---	---	920	890	---	---				
22	710	660	---	---	920	870	---	---				
23	710	680	---	---	890	860	---	---				
24	700	680	800	710	890	870	---	---				
25	720	690	---	790	870	830	---	---				
26	730	700	---	790	830	820	---	---				
27	740	720	850	780	830	820	---	---				
28	730	710	820	760	830	810	---	---				
29	720	700	---	720	930	810	---	---				
30	710	700	750	610	---	920	---	---				
31	720	700	---	---	1000	870	---	---				
MONTH	740	610	850	530	1050	600	---	---				

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	630	580	600	520	600	560	470	380	640	520
2	---	---	630	610	650	600	560	540	520	470	670	640
3	---	---	640	610	660	640	550	510	520	510	680	630
4	---	---	680	620	650	630	560	530	520	510	690	650
5	---	---	690	600	650	620	570	540	520	500	690	670
6	---	---	700	630	650	630	580	540	520	510	720	690
7	---	---	710	680	680	630	580	560	520	510	720	710
8	---	---	700	660	660	630	580	560	550	520	730	710
9	---	---	700	660	650	600	580	550	550	530	720	460
10	---	---	720	660	610	590	590	500	560	540	500	470
11	---	---	---	---	590	580	590	480	570	560	520	500
12	---	---	---	---	580	560	590	480	580	560	570	510
13	---	---	---	---	590	560	610	490	580	570	660	570
14	630	600	---	---	560	470	630	520	580	560	710	660
15	630	610	---	---	570	470	610	580	580	570	730	710
16	640	600	---	---	640	570	600	570	590	580	760	710
17	600	540	---	---	640	620	600	580	590	570	750	740
18	600	580	---	---	620	450	640	600	620	580	740	720
19	620	590	---	---	580	430	640	630	630	610	740	680
20	630	620	---	---	620	580	660	630	640	600	720	680
21	680	610	---	---	630	570	670	640	640	610	700	680
22	670	650	---	---	650	620	650	640	630	610	700	680
23	660	630	---	---	650	640	650	630	640	620	710	680
24	640	440	---	---	640	590	630	590	650	630	700	670
25	490	420	---	---	640	580	630	620	650	630	720	680
26	450	430	---	---	650	630	630	620	650	620	730	700
27	490	450	700	670	650	640	630	600	630	590	720	700
28	520	490	680	570	640	620	620	530	610	400	730	700
29	580	520	610	530	640	600	570	550	460	440	720	700
30	620	560	540	520	600	570	570	380	540	460	730	690
31	---	---	530	480	---	---	460	310	550	520	---	---
MONTH	---	---	---	---	680	430	670	310	650	380	760	460

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	11.5	9.0	0.5	0.0	0.0	0.0	0.0	0.0	1.0	0.5
2	---	---	11.0	9.0	0.5	0.0	0.0	0.0	0.0	0.0	1.5	0.5
3	15.0	12.5	12.5	11.0	0.5	0.0	0.0	0.0	0.0	0.0	2.0	1.0
4	15.5	12.0	14.5	11.5	1.0	0.0	0.0	0.0	0.0	0.0	1.5	1.0
5	15.0	12.0	14.0	11.0	4.0	0.5	0.0	0.0	0.0	0.0	1.0	0.0
6	16.0	12.5	15.5	13.0	2.5	0.5	0.0	0.0	0.0	0.0	1.5	0.0
7	16.5	13.5	16.5	14.5	1.0	0.5	0.0	0.0	0.0	0.0	2.0	0.0
8	16.5	14.0	15.5	13.5	0.5	0.0	0.0	0.0	0.0	0.0	1.5	0.0
9	15.5	14.0	13.5	13.0	1.5	0.0	0.0	0.0	0.0	0.0	1.5	0.5
10	15.0	13.0	13.5	9.5	0.5	0.0	0.0	0.0	0.0	0.0	3.0	1.0
11	15.0	12.5	10.0	9.0	0.5	0.0	0.0	0.0	0.0	0.0	4.0	1.5
12	15.0	12.0	9.0	6.0	1.0	0.0	0.0	0.0	0.0	0.0	4.0	2.5
13	17.0	13.0	6.0	4.0	5.5	1.0	0.0	0.0	0.5	0.0	3.5	2.0
14	18.0	16.5	5.5	2.5	7.5	5.5	0.0	0.0	0.5	0.0	3.5	1.5
15	18.0	16.5	6.5	2.5	6.0	4.0	0.0	0.0	1.0	0.0	3.0	1.5
16	17.5	14.5	7.0	4.5	4.0	1.0	0.0	0.0	0.5	0.0	3.0	1.0
17	15.5	12.5	9.5	5.5	1.0	0.0	0.0	0.0	1.0	0.5	3.5	0.5
18	13.0	11.0	11.0	7.0	0.0	0.0	0.0	0.0	1.0	0.5	4.5	1.5
19	11.0	10.5	10.5	7.0	0.0	0.0	0.0	0.0	1.5	0.5	8.0	4.0
20	13.0	10.5	9.5	7.0	0.0	0.0	0.0	0.0	1.5	0.5	11.0	7.5
21	13.0	11.0	7.0	4.5	0.0	0.0	0.0	0.0	1.0	0.5	9.0	6.5
22	13.0	11.0	5.5	2.5	0.0	0.0	0.0	0.0	1.5	0.5	8.0	5.5
23	15.0	12.5	4.5	2.0	0.0	0.0	0.0	0.0	2.0	0.5	8.0	5.0
24	15.0	13.0	2.0	0.5	0.0	0.0	0.0	0.0	2.0	0.0	9.5	6.0
25	14.5	12.0	2.0	0.0	0.0	0.0	0.0	0.0	1.5	0.5	9.0	7.5
26	13.0	11.0	0.5	0.0	0.0	0.0	0.0	0.0	3.0	0.5	11.0	6.0
27	11.5	9.5	0.5	0.0	0.0	0.0	0.0	0.0	2.5	0.5	10.0	8.5
28	11.0	10.0	0.5	0.0	0.0	0.0	0.0	0.0	2.5	0.5	9.0	7.5
29	12.5	9.0	5.5	0.5	0.0	0.0	0.0	0.0	2.0	0.5	9.0	8.0
30	10.0	8.5	5.5	0.5	0.0	0.0	0.0	0.0	---	---	9.5	9.0
31	10.5	8.0	---	---	0.0	0.0	0.0	0.0	---	---	9.0	8.5
MONTH	18.0	8.0	16.5	0.0	7.5	0.0	0.0	0.0	3.0	0.0	11.0	0.0
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	6.5	13.5	11.0	15.0	15.0	23.5	19.0	26.0	21.0	24.5	18.5
2	9.0	6.0	12.5	10.5	17.0	15.0	23.0	18.5	26.0	22.0	22.5	17.5
3	10.5	7.0	10.5	9.0	19.5	16.5	25.0	20.0	26.0	22.5	25.0	17.5
4	11.0	8.0	15.0	8.0	21.5	17.0	25.0	21.0	26.0	22.0	25.0	18.0
5	11.5	8.0	13.0	11.0	22.0	18.0	26.5	21.5	25.5	22.5	25.0	18.0
6	14.5	9.0	11.5	10.5	22.5	18.0	26.0	23.0	26.0	21.5	25.0	18.0
7	14.5	9.5	11.0	10.0	24.0	19.5	26.0	22.5	26.5	21.0	25.0	18.5
8	14.0	9.5	12.5	10.0	26.0	21.5	27.5	22.0	26.5	21.0	27.0	19.0
9	14.0	9.0	15.0	12.5	27.0	22.5	26.5	23.0	27.0	21.5	23.0	19.0
10	13.0	9.5	16.5	15.0	25.5	23.5	29.0	24.5	25.0	22.0	23.0	17.5
11	12.5	8.0	16.5	13.0	26.5	23.0	30.5	25.0	28.0	22.5	25.0	17.5
12	12.5	6.5	14.5	13.5	26.5	23.5	28.5	24.0	27.0	24.0	24.0	17.5
13	13.0	7.5	15.5	14.0	28.5	24.0	28.0	23.5	28.0	24.0	25.0	17.5
14	16.0	9.5	17.5	14.0	27.0	22.5	30.0	24.0	24.5	21.5	21.0	18.0
15	16.5	13.5	---	---	26.0	23.5	28.5	25.0	24.5	20.0	20.0	17.5
16	19.0	14.5	---	---	23.5	21.0	27.5	24.0	25.5	20.0	19.5	17.5
17	19.0	16.0	---	---	22.5	19.5	27.5	22.0	24.5	18.5	21.0	17.5
18	19.0	16.5	---	---	22.0	19.5	29.0	22.5	26.0	20.5	22.5	17.0
19	18.5	15.0	---	---	23.5	19.5	24.5	22.5	27.0	21.0	20.0	17.5
20	16.0	14.0	18.0	15.5	24.0	19.5	26.5	22.5	27.5	22.5	21.0	17.0
21	15.5	13.0	19.5	18.0	24.5	20.5	26.5	22.0	20.5	23.5	19.5	16.0
22	14.0	12.0	20.0	18.0	24.5	22.0	24.0	22.5	29.5	24.0	18.0	15.0
23	13.5	11.0	19.5	17.5	24.5	21.5	29.0	23.0	29.5	24.5	18.5	14.5
24	11.0	8.0	19.0	16.5	21.5	20.0	28.0	23.5	29.0	24.5	18.0	13.5
25	8.0	6.0	19.0	19.0	25.0	19.0	29.0	24.5	27.5	24.5	17.5	13.5
26	7.0	5.5	19.5	16.5	25.5	20.5	28.5	25.0	28.5	24.0	15.5	13.5
27	8.0	6.0	19.5	16.5	28.0	22.0	29.5	25.5	29.0	23.5	15.5	13.5
28	10.0	7.0	18.0	16.0	27.5	23.5	27.5	25.0	27.0	23.0	16.0	12.5
29	12.0	9.0	16.0	14.0	24.5	22.0	29.0	25.0	27.0	21.0	17.0	13.0
30	13.0	11.0	15.0	14.0	24.5	20.0	29.5	24.5	25.5	20.5	18.0	13.0
31	---	---	15.0	14.0	---	---	25.5	22.0	27.5	20.5	---	---
MONTH	19.0	5.5	20.0	8.0	28.5	15.0	30.5	18.5	29.5	18.5	27.0	12.5

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04087018 MEMONOMEE RIVER AT GERMANTOWN, WI

LOCATION.--LAT 43°13'17", LONG 88°07'58", IN SE 1/4 SW 1/4 SEC.21, T.9 N., R.20 E., WASHINGTON COUNTY, HYDROLOGIC UNIT 0404003, ON RIGHT BANK ABOUT 80 FT (24 M) DOWNSTREAM FROM RIVER LANE ROAD, ABOUT 150 FT (46 M) NORTHWEST OF JUNCTION OF RIVER LANE ROAD AND MEQUON ROAD, 2.0 MI (3.2 KM) NORTH OF WASHINGTON AND WAUKESHA COUNTY LINE, IN GERMANTOWN, 3.0 MI (4.8 KM) NORTHWEST OF MEMONOMEE FALLS, AND AT MILE 25.9 (41.7 KM).

DRAINAGE AREA.--18.8 MI² (48.7 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--DECEMBER 1974 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 840.00 FT (256 M) ABOVE MEAN SEA LEVEL (WISCONSIN STATE HIGHWAY BENCHMARK).

REMARKS.--RECORDS 6000. LOW FLOW AFFECTED BY EFFLUENT FROM SEWAGE TREATMENT PLANT 0.6 MI (1.0 KM) UPSTREAM.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 325 FT³/S (9.20 M³/S) MAR. 22, 1975, GAGE HEIGHT, 5.88 FT (1.79 M); MINIMUM, 1.2 FT³/S (0.034 M³/S) SEPT. 28, 1976, GAGE HEIGHT, 1.23 FT (0.40 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 264 FT³/S (7.48 M³/S) MAR. 6, GAGE HEIGHT, 5.57 FT (1.70 M); MINIMUM, 1.2 FT³/S (0.034 M³/S) SEPT. 28, GAGE HEIGHT, 1.23 FT (0.40 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).

OCT. 1 TO FEB. 14				FEB. 15 TO SEPT. 30			
1.3	2.6	3.0	46	1.2	1.0	3.0	60
1.5	6.6	4.0	87	1.3	2.0	4.0	102
2.0	19			1.4	3.9	5.0	102
				1.7	12	6.0	355
				2.0	23		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	3.6	35	5.4	4.5	60	42	26	10	4.5	3.9	2.2
2	4.0	4.4	19	5.4	4.1	52	35	22	8.8	5.1	3.5	2.1
3	4.0	6.6	15	5.5	4.3	58	29	20	7.7	4.8	3.3	1.9
4	3.9	6.8	12	5.0	4.5	73	25	18	7.5	3.7	2.9	1.9
5	3.5	6.4	12	4.4	4.4	189	22	18	6.7	3.6	2.7	1.8
6	3.5	5.6	14	4.3	4.4	177	20	29	5.9	4.1	2.9	1.6
7	3.8	5.3	12	4.3	4.5	132	17	26	5.8	3.9	2.6	1.7
8	3.8	6.4	10	4.3	4.4	83	15	21	5.9	3.7	2.2	1.7
9	3.7	9.0	10	4.1	4.3	67	14	16	5.8	3.5	2.1	1.8
10	3.8	15	9.2	3.9	4.9	60	13	14	5.5	3.5	2.0	1.9
11	4.2	8.5	9.0	3.9	5.4	56	15	13	5.8	3.0	2.5	1.8
12	4.0	6.5	8.7	3.9	6.0	72	14	14	6.0	2.4	2.4	1.7
13	3.3	5.5	9.6	3.9	10	114	13	13	6.0	3.1	2.6	1.6
14	3.6	5.5	33	3.9	9.4	99	13	13	13	3.7	2.7	1.7
15	3.7	5.4	36	3.9	31	76	12	17	11	2.4	2.4	1.8
16	3.7	5.3	26	4.1	54	56	13	38	8.2	2.4	2.3	1.8
17	3.8	5.5	20	3.9	34	37	12	29	7.1	2.5	2.4	1.9
18	3.7	5.5	10	3.6	43	34	11	21	6.3	2.2	2.3	2.0
19	3.4	5.1	7.2	3.6	59	39	11	17	5.4	1.9	2.2	2.0
20	3.5	5.4	7.3	3.9	48	46	11	15	4.9	2.2	2.0	2.3
21	3.7	6.0	7.0	3.9	38	42	16	13	4.6	3.1	1.9	2.1
22	3.5	5.9	6.6	4.1	25	32	22	12	4.6	3.1	1.8	2.0
23	3.8	5.4	6.6	3.9	23	28	17	11	4.6	2.5	1.8	1.9
24	3.7	5.2	6.3	4.3	24	26	52	10	4.6	2.3	2.4	1.8
25	3.6	5.1	6.2	4.3	31	23	155	9.1	4.6	2.0	2.4	1.8
26	3.1	4.7	6.2	4.3	54	25	141	8.7	4.4	2.4	2.2	1.8
27	3.2	4.9	6.2	4.3	73	86	90	8.3	4.2	3.1	2.0	1.8
28	3.4	4.9	6.0	4.1	78	77	51	8.0	3.9	2.5	2.7	1.4
29	3.2	15	5.6	4.5	73	62	35	13	3.7	2.3	2.4	1.5
30	3.8	52	5.7	4.5	---	56	28	12	3.9	2.7	2.4	1.8
31	3.2	---	5.6	4.5	---	50	---	11	---	6.3	2.3	---
TOTAL	112.6	236.4	383.0	131.9	763.1	2087	964	516.1	186.4	97.7	76.2	55.1
MEAN	3.63	7.88	12.4	4.25	26.3	67.3	32.1	16.6	6.21	3.15	2.46	1.84
MAX	4.3	52	36	5.5	78	189	155	38	13	6.3	3.9	2.3
MIN	3.0	3.6	5.6	3.6	4.1	23	11	8.0	3.7	1.9	1.8	1.4
CFSM	.19	.42	.66	.23	1.48	3.59	1.71	.88	.33	.17	.13	.10
IN.	.22	.47	.76	.26	1.51	4.14	1.91	1.02	.37	.19	.15	.11
CAL YR 1975	TOTAL	5309.1	MEAN 14.5	MAX 295	MIN 3.0	CFSM .77	IN 10.52					
WTR YR 1976	TOTAL	5609.5	MEAN 15.3	MAX 189	MIN 1.4	CFSM .82	IN 11.12					

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087018 MENOMONEE RIVER AT GERMANTOWN, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--NOVEMBER 1974 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: JANUARY 1975 TO CURRENT YEAR.

INSTRUMENTATION.--SEDIMENT PUMPING SAMPLER SINCE JANUARY 1, 1975.

REMARKS.--SEDIMENT RECORDS ARE GOOD. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 10 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 236 MG/L JUNE 11, 1975; MINIMUM DAILY MEAN, 6 MG/L JAN. 7, 1975. MAXIMUM OBSERVED, 333 MG/L DEC. 6, 1974; MINIMUM OBSERVED, 1 MG/L JUNE 1, 1975.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 67 TONS (60.8 TONNES) APR. 25, 1976; MINIMUM DAILY, 0.07 TON (0.06 TONNE) SEPT. 28, 1976.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 217 MG/L OCT. 25; MINIMUM DAILY MEAN, 8 MG/L MAR. 1. MAXIMUM OBSERVED, 226 MG/L APR. 25; MINIMUM OBSERVED, 6 MG/L FEB. 18.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 67 TONS (60.8 TONNES) APR. 25; MINIMUM DAILY, 0.07 TON (0.06 TONNE) SEPT. 28.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 24, 1975	1150	14.5	3.45	1050	June 28, 1976	1400	25.0	3.50	925
Jan. 12, 1976	1110	1.5	3.98	1080	July 14, 1976	1030	25.0	2.41	900
Apr. 5, 1976	1220	9.0	22.2	875	July 22, 1976	1330	24.0	2.00	1000
May 19, 1976	1210	14.0	16.8	900	Sept. 21, 1976	1055	15.0	2.19	1200

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.
				(T/DAY)	% FINER THAN .002 MM	% FINER THAN .004 MM	% FINER THAN .008 MM
FEB , 1976							
04...	1540	3.7	54	.54	29	32	40
MAY							
16...	1000	41	25	2.8	--	--	--
AUG							
31...	1545	2.0	26	.14	60	75	86

DATE	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.
	% FINER THAN .016 MM	% FINER THAN .031 MM	% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM
FEB , 1976						
04...	49	65	72	76	97	100
MAY						
16...	--	--	93	--	--	--
AUG						
31...	91	95	97	97	100	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BED MAT. SIEVE DIAM.								
			% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM	% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM	% FINER THAN 16.00 MM
AUG , 1976											
31...	1510	2.0	2	4	8	13	22	32	43	73	100

04087018 MEMONONEE RIVER AT GERMANTOWN, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)										
1	20	.23	102	1.0	50	4.7	11	.15	10	.12	8	1.3
2	19	.20	71	.63	50	2.6	12	.16	10	.11	11	1.6
3	35	.38	57	1.0	50	2.0	13	.19	10	.12	12	1.9
4	39	.41	60	1.1	66	2.2	14	.18	19	.23	18	3.8
5	43	.41	40	.69	35	1.1	15	.18	52	.61	44	23
6	39	.37	35	.53	33	1.2	16	.19	52	.61	63	39
7	37	.38	30	.43	32	1.0	18	.21	47	.57	49	18
8	48	.49	40	.69	30	.85	19	.23	30	.36	27	6.1
9	64	.64	40	.97	29	.78	21	.24	34	.39	16	2.8
10	63	.63	50	2.0	28	.69	15	.16	26	.33	14	2.3
11	57	.64	40	.92	27	.65	10	.10	20	.29	17	2.6
12	52	.55	40	.70	26	.61	10	.10	20	.33	20	3.9
13	47	.42	46	.70	25	.64	10	.10	21	.58	18	5.4
14	41	.40	46	.70	38	3.7	10	.10	19	.48	15	4.0
15	57	.56	64	.94	34	3.4	10	.10	35	3.5	13	2.7
16	50	.50	81	1.2	30	2.1	10	.11	30	4.6	13	2.0
17	62	.63	71	1.1	38	2.1	18	.10	34	3.2	15	1.5
18	69	.70	126	1.9	32	.90	10	.10	9	1.1	16	1.5
19	53	.50	95	1.3	30	.59	10	.10	12	2.0	17	1.8
20	51	.49	54	.78	27	.53	10	.10	18	2.3	19	2.3
21	38	.38	49	.80	25	.46	10	.10	18	1.8	20	2.3
22	44	.42	39	.63	22	.40	10	.11	19	1.3	22	1.9
23	65	.66	41	.60	20	.36	10	.10	20	1.3	23	1.8
24	188	1.9	35	.48	19	.32	10	.12	24	1.5	25	1.7
25	217	2.1	39	.53	17	.28	10	.12	21	1.7	23	1.4
26	210	1.8	35	.45	15	.26	10	.12	27	4.0	23	1.7
27	125	1.1	31	.41	14	.23	10	.12	27	5.3	46	10
28	92	1.1	27	.36	13	.20	10	.11	32	6.8	22	4.8
29	195	.82	24	.96	12	.17	10	.12	17	3.4	28	4.5
30	87	.72	35	5.0	10	.14	10	.12	---	---	39	5.9
31	105	.93	---	---	10	.14	10	.12	---	---	24	3.3
MONTH	---	21.46	---	29.70	---	35.30	---	4.16	---	48.93	---	166.80

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)										
1	25	2.8	77	5.5	101	2.8	25	.30	67	.70	30	.18
2	34	3.3	99	5.9	72	1.7	19	.26	44	.42	27	.15
3	57	4.4	114	6.3	48	1.0	20	.22	48	.43	23	.12
4	61	4.1	125	6.2	46	.93	24	.24	58	.46	20	.11
5	14	.82	132	6.4	47	.85	32	.31	66	.49	18	.09
6	12	.65	98	7.8	54	.86	40	.44	62	.49	21	.09
7	13	.60	93	6.4	61	.95	35	.38	57	.41	26	.11
8	14	.57	92	5.2	57	.91	32	.32	53	.31	29	.13
9	18	.67	90	3.9	54	.84	40	.38	53	.30	27	.14
10	23	.85	45	1.7	43	.65	47	.45	53	.29	25	.13
11	58	2.4	45	1.6	47	.75	39	.32	54	.35	23	.12
12	41	1.5	50	1.9	52	.84	33	.22	53	.35	25	.12
13	41	1.5	60	2.1	55	.89	42	.36	48	.35	29	.12
14	46	1.6	60	2.1	52	1.8	52	.52	44	.32	31	.15
15	61	2.0	79	3.6	54	1.5	48	.31	42	.26	27	.14
16	71	2.4	65	6.7	54	1.2	45	.29	50	.32	23	.12
17	79	2.6	92	7.1	56	1.1	51	.34	63	.40	19	.10
18	91	2.7	123	6.8	58	1.0	59	.35	70	.43	18	.10
19	76	2.3	120	5.4	62	.91	66	.34	46	.28	18	.10
20	77	2.3	113	4.4	41	.55	66	.40	30	.17	21	.13
21	105	4.2	107	3.6	28	.35	61	.51	23	.12	23	.13
22	63	3.8	113	3.7	19	.24	45	.37	19	.09	21	.11
23	72	3.4	113	3.4	20	.25	46	.31	16	.08	18	.10
24	86	13	91	2.5	22	.27	47	.30	14	.09	16	.08
25	161	67	81	2.0	20	.25	39	.21	14	.09	17	.09
26	57	22	106	2.5	15	.18	34	.22	18	.11	17	.09
27	27	6.6	126	2.8	15	.17	43	.36	24	.13	18	.09
28	22	3.0	114	2.5	20	.21	34	.23	29	.21	20	.07
29	36	3.3	80	2.8	33	.32	43	.27	28	.18	27	.11
30	57	4.2	52	1.7	34	.36	57	.42	26	.17	32	.16
31	---	---	55	1.6	---	---	49	.84	24	.15	---	---
MONTH	---	170.56	---	126.10	---	24.63	---	10.79	---	8.95	---	3.48

TOTAL LOAD FOR YEAR: 650.86 TONS.

STREAMS TRIBUTARY TO LAKE MICHIGAN

04067030 MEMONONEE RIVER AT MEMONONEE FALLS, WI

LOCATION.--LAT 43°18'22", LONG 88°06'14", IN SE 1/4 NE 1/4 SEC.10, T.8 N., R.20 E., WAUKESHA COUNTY, HYDROLOGIC UNIT 8480003, ON RIGHT BANK, 150 FT (46 M) UPSTREAM FROM PILGRIM ROAD (COUNTY TRUNK HIGHWAY YY) BRIDGE IN MEMONONEE FALLS, AT MILE 21.1 (33.9 KM).

DRAINAGE AREA.--34.5 MI² (89.4 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--NOVEMBER 1974 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 753.50 FT (229.67 M) ABOVE MEAN SEA LEVEL (UNIVERSITY OF WISCONSIN BENCHMARK).

REMARKS.--RECORDS ARE GOOD EXCEPT THOSE FOR ICE PERIODS, WHICH ARE POOR. OCCASIONAL REGULATION OBSERVED CAUSED BY DAM IN MEMONONEE FALLS, ABOUT 1.0 MI (1.6 KM) UPSTREAM.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 527 FT³/S (14.9 M³/S) MAR. 22, 1975, GAGE HEIGHT, 5.59 FT (1.70 M); MAXIMUM GAGE HEIGHT, 5.99 FT (1.83 M) FEB. 16, 1976, (BACKWATER FROM ICE); MINIMUM DISCHARGE, 1.2 FT³/S (0.034 M³/S) SEPT. 13, 1976, GAGE HEIGHT, 2.54 FT (0.77 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 381 FT³/S (10.8 M³/S) MAR. 4, GAGE HEIGHT, 5.14 FT (1.57 M); MAXIMUM GAGE HEIGHT, 5.99 FT (1.83 M) FEB. 16 (BACKWATER FROM ICE); MINIMUM DISCHARGE, 1.2 FT³/S (0.034 M³/S) SEPT. 13, GAGE HEIGHT, 2.54 FT (0.77 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 17 TO FEB. 16.)

OCT. 1 TO NOV. 28				NOV. 29 TO SEPT. 30			
2.6	2.6	2.9	10	2.7	3.5	3.5	55
2.7	4.0	3.1	20	2.6	5.8	4.0	131
2.8	6.6	3.3	34	3.0	13	5.0	347
				3.2	26	6.0	645

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	4.7	9.1	6.6	5.5	92	71	42	19	4.9	4.7	2.3
2	5.3	13	46	6.6	5.0	96	60	36	16	5.6	3.7	1.7
3	5.0	17	34	7.3	5.2	105	46	33	14	5.0	3.6	1.7
4	5.0	14	26	6.2	5.5	182	43	30	12	3.7	3.5	1.5
5	4.4	10	26	5.6	5.2	351	38	41	11	3.6	4.8	1.5
6	4.4	8.7	30	5.3	5.2	282	35	60	9.4	3.4	3.6	1.5
7	4.6	8.6	25	5.3	5.5	269	31	47	8.8	4.2	3.3	1.6
8	4.8	13	21	5.2	5.2	210	26	37	8.3	3.4	2.9	1.6
9	4.8	14	20	5.0	5.3	132	26	31	7.6	3.2	2.7	3.1
10	3.9	31	19	4.8	6.0	105	26	29	6.9	3.1	2.7	1.8
11	4.0	19	19	4.6	7.0	94	33	26	6.6	2.6	2.7	1.7
12	4.8	14	18	4.7	8.2	146	28	23	6.5	2.2	2.7	1.6
13	4.1	12	29	4.7	15	215	26	21	9.9	2.6	2.8	1.4
14	4.4	11	89	4.7	14	191	25	21	35	2.6	5.3	1.5
15	5.0	10	81	4.8	40	140	26	43	15	3.1	2.8	1.7
16	5.0	10	54	5.0	100	91	26	81	11	2.9	2.5	1.6
17	4.5	9.9	28	4.7	64	63	25	52	9.2	2.6	2.8	1.7
18	4.8	9.7	15	4.2	88	52	22	35	7.8	2.5	2.6	1.8
19	4.3	6.6	10	4.2	99	59	21	27	7.3	2.4	2.6	4.3
20	4.1	12	10	4.8	65	70	22	23	6.6	3.0	2.4	2.8
21	4.4	12	9.5	4.7	50	65	36	19	5.7	3.1	2.4	2.1
22	3.9	12	9.2	5.0	46	49	43	17	5.6	2.7	2.3	2.0
23	4.2	10	9.0	4.7	43	41	34	16	5.7	2.9	2.1	1.9
24	4.1	9.9	8.6	5.2	36	39	137	15	5.7	2.7	2.1	1.7
25	4.2	12	8.2	5.2	59	36	384	14	5.8	2.3	2.7	1.7
26	3.8	18	8.2	5.2	104	44	288	13	5.1	2.1	2.8	1.8
27	3.8	16	8.2	5.2	140	170	201	13	4.8	3.2	2.3	1.8
28	4.5	9.6	7.8	5.0	142	165	96	16	5.2	5.1	6.1	1.6
29	4.0	64	7.2	5.6	122	101	56	30	4.6	3.2	2.1	1.3
30	4.0	134	6.6	5.6	---	98	46	26	7.3	7.9	1.9	1.6
31	4.2	---	6.6	5.6	---	01	---	22	---	11	1.9	---
TOTAL	138.7	547.9	780.1	161.5	1295.8	3856	1907	947	283.4	113.0	93.4	55.9
MEAN	4.47	18.3	25.2	5.21	44.7	124	63.6	30.5	9.45	3.65	3.01	1.86
MAX	5.8	134	91	7.3	142	351	384	81	35	11	6.1	4.3
MIN	3.8	4.7	6.6	4.2	5.0	36	21	13	4.6	2.1	1.9	1.3
CFSM	.13	.53	.73	.15	1.29	3.59	1.84	.88	.27	.11	.09	.05
IN.	.15	.59	.84	.17	1.40	4.15	2.05	1.02	.31	.12	.10	.06
CAL YR 1975 TOTAL	10004.1			MEAN 27.4	MAX 447	MIN 3.8	CFSM .79	IN 10.77				
WTR YR 1976 TOTAL	10179.7			MEAN 27.8	MAX 351	MIN 1.3	CFSM .80	IN 10.96				

04087030 MEMOMONEE RIVER AT MEMOMONEE FALLS, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1975 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: MARCH 1975 TO CURRENT YEAR.

INSTRUMENTATION.--SEDIMENT PUMPING SAMPLER SINCE MARCH 1, 1975.

REMARKS.--SEDIMENT RECORDS ARE GOOD. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 10 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 436 MG/L JULY 24, 1975; MINIMUM DAILY MEAN, 1 MG/L OCT. 4, 1975. MAXIMUM OBSERVED, 817 MG/L JULY 18, 1975; MINIMUM OBSERVED, 1 MG/L ON MANY DAYS.
SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 139 TONS (126 TONNES) MAR. 22, 1975; MINIMUM DAILY, 0.01 TON (0.01 TONNE) ON MANY DAYS.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 180 MG/L JUNE 14; MINIMUM DAILY MEAN, 1 MG/L OCT. 2, 4. MAXIMUM OBSERVED, 715 MG/L JUNE 14; MINIMUM OBSERVED, 1 MG/L OCT. 2, 3, 4.
SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 130 TONS (118 TONNES) APR. 25; MINIMUM DAILY, 0.01 TON (0.01 TONNE) ON MANY DAYS.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 21, 1975	1460	13.0	4.91	925	Apr. 6, 1976	1225	10.5	35.2	575
Dec. 3, 1975	1540	0.5	30.3	950	May 18, 1976	1350	14.0	35.3	860
Jan. 14, 1976	1430	0.0	4.44	1000	June 28, 1976	1130	25.0	5.30	875
Feb. 26, 1976	1750	3.5	127	875	Aug. 31, 1976	1230	23.0	1.93	925

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
AUG , 1976											
31...	1205	2.1	10	.06	80	83	88	92	96	99	100
SEP											
19...	1950	14	34	1.3	69	78	90	97	98	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG , 1976												
31...	1215	2.1	2	3	6	15	26	34	45	60	70	100

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087030 MEMONEE RIVER AT MEMONEE FALLS, WI-CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)										
1	2	.03	10	.13	36	8.8	15	.27	15	.22	16	4.1
2	1	.01	36	2.0	42	5.2	15	.27	15	.20	25	6.5
3	1	.01	28	1.5	45	4.2	15	.30	15	.21	22	6.2
4	1	.01	17	.65	17	1.2	15	.25	15	.22	40	20
5	2	.02	13	.35	19	1.4	15	.23	15	.21	54	51
6	3	.04	11	.26	36	2.9	15	.21	15	.21	24	18
7	5	.06	14	.43	33	2.2	15	.21	15	.22	10	14
8	3	.03	25	.87	28	1.6	15	.21	15	.21	7	4.2
9	3	.04	24	1.1	24	1.3	15	.20	16	.23	26	8.8
10	3	.03	39	3.5	20	1.0	15	.19	20	.32	27	7.6
11	3	.04	20	1.0	17	.85	15	.19	25	.47	6	1.5
12	5	.07	15	.59	14	.69	15	.19	30	.66	44	22
13	6	.07	14	.45	30	2.9	15	.19	35	1.4	39	22
14	6	.09	12	.37	54	13	15	.19	36	1.4	15	8.0
15	7	.10	11	.31	27	6.2	15	.19	34	3.7	9	3.6
16	8	.14	9	.25	16	2.3	15	.20	32	8.6	8	2.0
17	4	.05	9	.23	13	.98	15	.19	30	5.1	25	4.2
18	4	.05	7	.18	14	.56	15	.17	26	6.0	20	3.9
19	3	.04	7	.16	16	.43	15	.17	13	3.5	21	3.4
20	3	.04	10	.35	19	.51	15	.19	17	3.0	16	3.0
21	8	.10	18	.58	22	.56	15	.19	25	3.4	12	2.2
22	10	.11	28	.87	25	.62	15	.20	35	4.3	10	1.3
23	10	.11	20	.55	26	.63	15	.19	47	5.5	7	.83
24	10	.11	14	.37	27	.63	15	.21	40	3.9	6	.63
25	10	.12	16	.53	28	.62	15	.21	88	14	7	.68
26	10	.10	40	1.9	25	.55	15	.21	100	28	16	3.8
27	10	.10	41	1.9	25	.55	15	.21	80	30	72	33
28	10	.12	56	1.4	20	.42	15	.20	28	11	27	12
29	10	.11	55	9.6	20	.39	15	.23	21	7.1	18	4.9
30	10	.11	42	15	20	.36	15	.23	---	---	15	4.0
31	10	.11	---	---	20	.36	15	.23	---	---	12	2.8
MONTH	---	2.17	---	47.38	---	63.91	---	6.52	---	143.28	---	280.14

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)										
1	10	2.0	15	1.8	20	1.0	19	.26	35	.45	20	.13
2	8	1.2	16	1.6	20	.86	18	.28	17	.17	12	.06
3	10	1.3	21	1.8	17	.62	17	.23	11	.11	11	.05
4	12	1.4	16	1.3	13	.44	16	.16	8	.08	11	.04
5	14	1.4	44	6.8	12	.35	15	.15	43	.58	10	.04
6	16	1.5	66	12	13	.32	15	.13	25	.24	9	.04
7	10	1.5	23	3.0	14	.33	14	.13	20	.17	10	.04
8	57	4.3	22	2.2	15	.34	13	.12	16	.12	12	.05
9	67	4.7	19	1.6	15	.31	12	.11	14	.10	30	.26
10	59	4.4	27	2.4	10	.19	12	.10	14	.10	23	.11
11	51	4.6	24	1.7	9	.16	11	.08	14	.10	19	.09
12	49	3.1	27	1.7	8	.14	10	.06	14	.10	16	.07
13	43	3.0	30	1.7	14	.89	10	.07	11	.08	14	.05
14	43	2.9	29	1.6	180	14	9	.07	28	.42	11	.05
15	46	3.6	49	7.3	110	5.0	11	.09	16	.12	10	.04
16	47	3.3	55	12	60	1.8	31	.25	17	.12	8	.04
17	35	2.4	32	4.4	40	.99	21	.15	13	.10	7	.03
18	24	1.4	24	2.3	20	.42	21	.14	10	.07	7	.03
19	17	.97	30	2.2	20	.39	18	.11	8	.06	16	.31
20	20	1.5	29	1.8	20	.35	14	.11	7	.04	12	.10
21	21	2.0	43	2.2	20	.31	18	.15	7	.04	7	.04
22	21	2.4	30	1.4	20	.30	12	.09	7	.04	5	.03
23	24	2.2	22	.95	20	.31	9	.07	6	.03	3	.02
24	105	59	22	.89	20	.31	6	.05	5	.03	2	.01
25	161	130	20	.76	20	.32	5	.03	10	.07	2	.01
26	83	65	16	.56	20	.28	5	.03	12	.09	2	.01
27	48	27	10	.35	20	.26	9	.08	9	.05	3	.01
28	22	6.1	13	.56	20	.31	31	.49	65	1.1	4	.02
29	20	3.0	20	1.4	25	.31	15	.13	22	.12	4	.01
30	19	2.4	20	1.4	32	.77	35	2.7	12	.06	2	.01
31	---	---	22	1.3	---	---	78	2.5	10	.05	---	---
MONTH	---	349.57	---	83.17	---	32.38	---	9.12	---	5.01	---	1.80

TOTAL LOAD FOR YEAR: 1024.45 TONS.

04087040 MEMOMONEE RIVER AT BUTLER, WI

LOCATION.--LAT 43°06'52", LONG 88°03'57", IN SE 1/4 SEC.36, T.8 N., R.20 E., WAUKESHA COUNTY, HYDROLOGIC UNIT 04040003, AT NORTHWEST CORNER OF 124TH STREET BRIDGE IN BUTLER, AT MILE 13.5 (21.7 KM).

DRAINAGE AREA.--60.6 MI² (157 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--NOVEMBER 1974 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 692.08 FT (209.14 M) ABOVE MEAN SEA LEVEL, (SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION BENCHMARK).

REMARKS.--RECORDS ARE GOOD EXCEPT THOSE FOR ICE PERIODS, WHICH ARE FAIR.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 1,810 FT³/S (51.3 M³/S) MAR. 5, 1976, GAGE HEIGHT, 16.48 FT (5.02 M); MINIMUM, 2.6 FT³/S (0.074 M³/S) AUG. 8, 1976, GAGE HEIGHT, 10.83 FT (3.30 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 1,810 FT³/S (51.3 M³/S) MAR. 5, GAGE HEIGHT, 16.48 FT (5.02 M); MINIMUM, 2.6 FT³/S (0.074 M³/S) AUG. 8, GAGE HEIGHT, 10.83 FT (3.30 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 16 TO FEB. 14.)

OCT. 1 TO OCT. 5		OCT. 6 TO SEPT. 30			
10.8	7.0	10.8	2.6	12.0	93
10.9	9.4	10.9	4.2	13.0	270
11.0	13	11.0	6.7	14.0	530
11.2	23	11.1	11	15.0	910
		11.3	23	16.0	1,450
		11.6	47		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	9.4	155	18	13	157	129	77	36	9.4	8.5	6.5
2	9.8	26	73	17	12	177	105	65	32	8.7	5.7	4.7
3	9.2	34	50	18	13	257	86	60	27	9.0	6.4	4.5
4	9.2	26	41	16	13	536	75	55	24	6.7	5.9	4.1
5	8.2	18	39	14	13	1040	66	85	21	5.8	8.6	3.9
6	8.0	18	42	13	13	468	61	172	18	5.9	6.4	3.7
7	8.4	18	37	13	13	406	55	95	17	7.1	5.8	4.1
8	8.8	25	33	13	13	324	49	69	16	7.0	4.8	5.3
9	8.8	28	31	12	13	243	46	54	15	6.2	4.6	12
10	7.2	61	30	11	15	202	45	49	13	6.0	5.1	5.6
11	7.4	32	29	11	17	180	64	46	13	5.2	5.4	4.6
12	8.8	24	29	11	20	364	50	43	13	4.5	5.6	4.0
13	8.0	21	53	11	36	437	45	42	13	4.7	5.5	3.7
14	8.4	18	162	11	32	296	42	40	78	6.1	12	4.4
15	11	17	138	11	155	234	46	92	31	5.6	5.6	4.8
16	9.2	16	83	12	215	170	52	208	21	6.5	4.3	4.9
17	8.3	16	46	11	152	107	47	113	17	5.2	4.6	5.2
18	8.6	16	32	10	288	95	40	71	15	4.7	4.7	5.0
19	9.0	15	24	10	226	102	36	56	14	4.5	4.9	6.9
20	8.5	20	24	11	132	114	38	46	12	5.3	5.0	13
21	8.3	21	23	11	99	110	67	39	11	5.3	5.0	5.4
22	7.7	19	22	12	76	84	81	34	10	4.9	4.5	4.8
23	9.0	17	22	12	76	75	63	31	11	5.2	4.1	4.7
24	8.3	16	21	13	72	68	365	28	11	4.9	4.9	4.2
25	7.9	15	20	13	130	62	650	27	11	4.3	5.4	4.3
26	7.1	16	20	13	255	71	384	25	10	3.7	7.7	4.4
27	7.1	15	20	13	312	438	285	24	8.5	4.5	5.6	4.0
28	7.9	15	19	12	265	260	175	28	9.8	12	23	4.4
29	9.0	114	18	13	208	190	101	55	8.8	5.5	5.3	4.4
30	8.6	265	17	13	---	187	82	45	17	12	4.3	4.4
31	8.6	---	18	13	---	156	---	42	---	38	4.5	---
TOTAL	265.3	971.4	1371	392	2897	7610	3430	1916	554.1	224.4	193.7	155.9
MEAN	8.56	32.4	44.2	12.6	99.9	245	114	61.8	18.5	7.24	6.25	5.28
MAX	11	265	162	18	312	1040	650	208	78	38	23	13
MIN	7.1	9.4	17	10	12	62	36	24	8.5	3.7	4.1	3.7
CFSM	.14	.53	.73	.21	1.65	4.04	1.88	1.02	.31	.12	.10	.09
IN.	.16	.60	.84	.24	1.78	4.67	2.10	1.18	.34	.14	.12	.10
CAL YR 1975 TOTAL	17915.4			MEAN 49.1	MAX 784	MIN 7.1	CFSM .81	IN 10.99				
WTR YR 1976 TOTAL	19988.8			MEAN 54.6	MAX 1040	MIN 3.7	CFSM .90	IN 12.26				

WATER-QUALITY RECORDS

PERIOD OF RECORD.--APRIL 1973 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: MARCH 1975 TO CURRENT YEAR.

INSTRUMENTATION.--SEDIMENT PUMPING SAMPLER SINCE MARCH 1, 1975.

REMARKS.--SEDIMENT RECORDS ARE GOOD. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 10 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 725 MG/L JUNE 24, 1975; MINIMUM DAILY MEAN, 2 MG/L JAN. 23, FEB. 2, 1976. MAXIMUM OBSERVED, 113 MG/L MAR. 12, 1976; MINIMUM OBSERVED, 2 MG/L JAN. 27, 1976. SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 670 TONS (608 TONNES) APR. 25, 1976; MINIMUM DAILY, 0.06 TON (0.05 TONNE) JAN. 23, 28, FEB. 2, 1976.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 369 MG/L JULY 31; MINIMUM DAILY MEAN, 2 MG/L JAN. 23, FEB. 2. MAXIMUM OBSERVED, 1,130 MG/L MAR. 12; MINIMUM OBSERVED, 2 MG/L JAN. 27. SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 670 TONS (608 TONNES) APR. 25; MINIMUM DAILY, 0.06 TON (0.05 TONNE) JAN. 23, 28, FEB. 2.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 22, 1975	1455	12.0	8.09	1400	May 21, 1976	1300	18.0	37.3	1100
Nov. 25, 1975	1120	1.0	14.9	1400	June 22, 1976	1545	22.5	9.91	1400
Jan. 6, 1976	1420	0.0	12.5	1550	Aug. 4, 1976	1545	21.5	5.87	1600
Feb. 19, 1976	1230	0.0	220	500	Sept. 13, 1976	1145	19.0	3.92	1850
Apr. 7, 1976	1605	12.0	52.3	700					

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT CHARGE (T/DAY)	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.
					% FINER THAN .002 MM	% FINER THAN .004 MM	% FINER THAN .008 MM
FEB , 1976							
18...	1515	335	267	242	49	58	71
MAY							
06...	0025	225	123	75	--	--	--
JUL							
30...	2355	48	213	28	67	81	91
31...	0450	88	260	62	54	67	80
31...	1555	20	80	4.3	66	78	87
SEP							
15...	1050	5.2	133	1.9	45	55	67

DATE	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.
	% FINER THAN .016 MM	% FINER THAN .031 MM	% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM
FEB , 1976						
18...	83	92	96	97	99	100
MAY						
06...	--	--	99	--	--	--
JUL						
30...	95	99	99	100	--	--
31...	92	97	99	100	--	--
31...	95	98	100	--	--	--
SEP						
15...	84	95	96	98	100	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BED MAT. SIEVE DIAM.							
			% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM	% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM
SEP , 1976										
15...	1035	5.2	24	34	35	41	49	59	77	86

04087040 MEMOMONEE RIVER AT BUTLER, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TDNS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)										
1	38	1.1	42	1.1	120	50	14	.68	2	.07	21	9.1
2	35	.92	101	7.1	89	19	13	.60	2	.06	17	8.2
3	33	.84	120	11	49	6.7	12	.58	3	.10	28	20
4	30	.81	93	6.5	46	5.2	11	.48	3	.10	93	257
5	28	.89	50	2.4	43	4.6	10	.38	3	.10	148	499
6	26	.85	47	2.3	39	4.5	10	.35	3	.10	35	45
7	27	.99	44	2.1	36	3.5	9	.32	3	.10	22	24
8	38	1.6	100	6.8	32	2.9	8	.28	3	.10	10	9.1
9	44	1.8	110	8.3	29	2.5	8	.26	4	.14	6	3.8
10	45	1.9	180	30	27	2.1	7	.21	8	.32	5	2.8
11	33	1.1	120	10	24	1.9	6	.18	10	.46	9	4.1
12	35	1.2	100	6.5	22	1.7	6	.18	17	.92	266	381
13	40	1.4	98	5.3	101	22	5	.15	54	5.2	121	173
14	40	1.4	86	4.3	179	76	5	.15	30	2.6	26	21
15	48	1.4	72	3.4	74	28	5	.15	107	55	16	10
16	41	1.0	61	2.7	43	9.7	4	.13	105	61	12	5.8
17	40	.84	51	2.2	30	3.7	4	.12	64	27	10	2.8
18	40	.93	43	1.6	33	2.9	4	.11	101	87	8	2.0
19	39	.96	39	1.5	35	2.3	3	.08	66	43	9	2.5
20	39	.90	76	4.3	35	2.3	3	.09	38	14	9	2.8
21	38	.86	70	4.0	36	2.2	3	.09	30	8.1	9	2.7
22	38	.79	39	2.0	34	2.0	3	.10	26	5.4	9	2.0
23	39	1.0	30	1.4	29	1.7	2	.06	25	5.2	10	1.9
24	38	.85	27	1.2	27	1.5	2	.07	22	4.5	14	2.6
25	37	.79	30	1.1	25	1.4	2	.07	35	14	15	2.6
26	34	.65	26	1.1	23	1.2	2	.07	53	38	26	7.5
27	34	.65	26	1.0	21	1.1	2	.07	56	47	213	277
28	37	.79	28	1.1	20	1.0	2	.06	37	27	46	33
29	41	1.0	174	62	18	.87	2	.07	25	14	38	19
30	40	.93	168	121	17	.78	2	.07	---	---	36	18
31	40	.93	---	---	15	.73	2	.07	---	---	25	10
MONTH	---	32.07	---	315.50	---	265.98	---	6.28	---	460.57	---	1859.30

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)										
1	17	5.9	20	4.2	50	4.8	67	1.7	212	4.9	162	2.8
2	16	4.6	15	2.7	43	3.8	46	1.1	162	2.5	139	1.8
3	18	4.1	16	2.6	39	2.8	34	.82	122	2.1	114	1.4
4	19	3.9	21	3.0	29	1.9	35	.64	121	1.9	110	1.2
5	19	3.4	106	42	23	1.3	41	.64	160	3.8	109	1.1
6	25	4.2	110	57	29	1.4	54	.86	154	2.7	108	1.1
7	18	2.7	35	9.0	36	1.6	70	1.3	141	2.2	105	1.2
8	16	2.1	41	7.6	34	1.5	65	1.2	129	1.7	100	1.5
9	15	1.8	49	7.5	31	1.3	57	.97	120	1.5	137	4.4
10	15	1.9	70	9.3	33	1.2	51	.83	116	1.6	127	1.9
11	29	4.9	60	7.5	35	1.2	46	.65	114	1.7	118	1.5
12	40	5.4	34	4.0	31	1.1	45	.54	116	1.7	114	1.2
13	30	3.6	58	6.6	30	1.1	79	1.0	109	1.6	114	1.1
14	30	3.4	52	5.7	223	52	84	1.4	119	4.1	131	1.5
15	63	15	80	29	87	7.6	132	2.0	104	1.6	150	1.9
16	95	15	70	41	41	2.4	149	2.6	73	.85	145	1.9
17	44	5.5	44	14	43	2.0	140	2.0	70	.88	136	1.9
18	40	4.3	43	8.2	50	2.1	133	1.7	73	.93	119	1.6
19	36	3.5	42	6.3	43	1.6	129	1.6	73	.96	113	2.2
20	34	3.2	42	5.2	36	1.1	135	1.9	73	.98	146	6.2
21	50	9.2	41	4.3	39	1.1	138	2.0	73	.98	97	1.4
22	43	9.6	36	3.3	47	1.3	116	1.6	73	.89	96	1.2
23	56	9.2	31	2.6	77	2.3	97	1.4	75	.82	94	1.2
24	342	567	27	2.1	82	2.4	94	1.2	83	1.1	85	.98
25	333	670	24	1.7	80	2.4	93	1.1	93	1.4	76	.90
26	100	106	25	1.7	65	1.8	88	.88	81	1.7	68	.81
27	50	39	28	1.8	52	1.2	66	.80	62	.94	60	.66
28	38	19	43	3.7	50	1.3	122	4.5	164	11	57	.67
29	33	8.9	86	13	50	1.2	105	1.6	161	2.3	54	.65
30	34	7.4	69	8.4	113	5.6	136	8.4	128	1.5	52	.62
31	---	---	58	6.6	---	---	369	52	127	1.5	---	---
MONTH	---	1543.70	---	321.60	---	114.40	---	100.93	---	64.33	---	48.49

TOTAL LOAD FOR YEAR: 5133.15 TONS.

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087050 LITTLE MEMOMONEE RIVER NEAR FREISTADT, WI

LOCATION.--LAT 43°12'24", LONG 88°02'18", IN NE 1/4 NW 1/4 SEC.32, T.9 N., R.21 E., OZAUKEE COUNTY, HYDROLOGIC UNIT 04040003, ON RIGHT BANK, 75 FT (23 M) DOWNSTREAM FROM BRIDGE ON DONGES BAY ROAD, 2.0 MI (3.2 KM) SOUTH OF FREISTADT, AT MILE 7.97 (12.8 KM).

DRAINAGE AREA.--7.88 MI² (20.4 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--OCTOBER 1958 TO DECEMBER 1974, ANNUAL MAXIMUM ONLY, PUBLISHED IN WSP 1911, 2111, AND WDR-WI 1971-74, DECEMBER 1974 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 725.3; FT (221.09 M) ABOVE MEAN SEA LEVEL, (UNIVERSITY OF WISCONSIN BENCHMARK). PRIOR TO DECEMBER 1974, NONRECORDING GAGE 75 FT (23 M) UPSTREAM AND AT DIFFERENT DATUM.

REMARKS.--RECORDS ARE GOOD EXCEPT FOR WINTER PERIODS, WHICH ARE FAIR.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 360 FT³/S (10.2 M³/S) APR. 21, 1973, GAGE HEIGHT, 13.14 FT (4.00 M); MINIMUM, 0.01 FT³/S (0.0003 M³/S) SEPT. 13, 14, 1976, GAGE HEIGHT, 1.99 FT (0.61 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 240 FT³/S (6.80 M³/S) MAR. 5, GAGE HEIGHT, 6.78 FT (2.07 M); MINIMUM, 0.01 FT³/S (0.0003 M³/S) SEPT. 13, 14, GAGE HEIGHT, 1.99 FT (0.61 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 19 TO FEB. 12.)

OCT. 1 TO MAR. 4				MAR. 5 TO SEPT. 30			
2.0	.18	2.7	9.6	1.9	.01	2.7	9.1
2.1	.51	3.0	20	2.0	.15	3.0	18
2.2	1.1	3.5	41	2.1	.44	4.0	54
2.3	2.0	4.0	56	2.2	.98	5.0	93
2.4	3.4	4.5	74	2.3	1.8	6.0	150
				2.5	4.7	6.5	198

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	.60	12	1.8	1.4	20	17	12	4.1	.94	2.8	.15
2	.29	1.5	8.3	1.8	1.3	26	14	10	3.4	.81	1.6	.15
3	.25	3.0	6.1	1.8	1.4	32	12	9.0	2.8	.73	.98	.15
4	.25	2.0	5.1	1.6	1.4	70	10	7.8	2.5	.69	.77	.07
5	.27	1.0	5.0	1.4	1.3	154	9.2	9.5	2.2	.64	.73	.08
6	.43	.96	4.8	1.3	1.3	65	8.2	15	2.1	.61	.66	.08
7	.43	.90	4.0	1.3	1.3	46	7.2	11	1.8	.60	.55	.06
8	.40	1.2	3.6	1.3	1.3	33	6.3	8.6	1.6	.60	.48	.05
9	.47	2.5	3.4	1.3	1.4	28	5.7	7.6	1.4	.57	.42	.16
10	.50	9.0	3.1	1.2	1.5	27	5.5	6.9	1.4	.54	.40	.12
11	.47	3.0	3.0	1.2	1.6	23	6.2	6.5	1.3	.50	.40	.10
12	.53	2.0	2.9	1.2	2.0	55	5.3	5.1	1.4	.47	.33	.04
13	.65	1.4	5.7	1.2	9.9	52	5.0	4.9	1.6	.46	.31	.03
14	.75	1.0	20	1.2	7.8	32	4.9	4.7	3.7	.44	.46	.02
15	1.1	.97	13	1.2	25	24	6.9	6.4	2.5	.42	.36	.05
16	.54	.92	9.0	1.3	16	19	8.5	11	1.8	.40	.31	.08
17	.32	.89	6.0	1.2	13	15	7.2	8.3	1.6	.37	.30	.08
18	.49	.84	4.5	1.1	32	14	6.2	6.3	1.5	.32	.30	.08
19	.62	1.2	2.6	1.1	27	15	5.3	5.6	1.4	.32	.28	.13
20	.48	2.1	2.6	1.2	18	16	5.0	5.1	1.3	.39	.25	.21
21	.47	2.3	2.5	1.2	14	14	7.1	4.2	1.2	.35	.22	.16
22	.42	1.9	2.3	1.2	13	10	8.2	3.8	1.1	.30	.22	.18
23	.42	1.6	2.3	1.2	11	9.8	6.5	3.5	1.2	.34	.22	.18
24	.51	1.6	2.2	1.3	10	9.2	51	3.3	1.2	.28	.21	.18
25	.51	1.6	2.1	1.3	12	8.2	81	3.0	1.3	.18	.22	.19
26	.51	1.6	2.1	1.3	26	9.0	44	2.8	1.1	.17	.29	.17
27	.53	1.5	2.1	1.3	40	55	29	2.5	1.0	.17	.24	.16
28	.51	1.8	2.0	1.3	34	28	20	2.7	1.1	.28	.36	.15
29	.51	15	1.9	1.4	28	21	16	5.5	.98	.28	.21	.13
30	.53	30	1.9	1.4	---	24	13	4.9	1.1	1.4	.17	.13
31	.55	---	1.8	1.4	---	20	---	4.7	---	.86	.15	---
TOTAL	15.04	95.88	147.9	41.0	353.9	974.2	431.4	202.2	52.68	15.43	15.20	3.52
MEAN	.49	3.20	4.77	1.32	12.2	31.4	14.4	6.52	1.76	.50	.49	.12
MAX	1.1	30	20	1.8	40	154	81	15	4.1	1.4	2.8	.21
MIN	.25	.60	1.8	1.1	1.3	8.2	4.9	2.5	.98	.17	.15	.02
CFSM	.06	.40	.60	.17	1.53	3.94	1.81	.82	.22	.06	.06	.02
IN.	.07	.45	.69	.19	1.65	4.55	2.02	.94	.25	.07	.07	.02
CAL YR 1975	TOTAL	1941.76	MEAN	5.32	MAX	127	MIN	.17	CFSM	.67	IN	9.07
WTR YR 1976	TOTAL	2348.35	MEAN	6.42	MAX	154	MIN	.02	CFSM	.81	IN	10.97

04087050 LITTLE MEMOMONEE RIVER NEAR FREISTADT, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--APRIL 1973 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: MARCH 1975 TO CURRENT YEAR.

INSTRUMENTATION.--SEDIMENT PUMPING SAMPLER SINCE MARCH 1, 1975.

REMARKS.--SEDIMENT RECORDS ARE GOOD. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 10 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 366 MG/L JULY 24, 1975; MINIMUM DAILY MEAN, 2 MG/L

MAR. 9-13, 1975. MAXIMUM OBSERVED, 1,120 MG/L APR. 28, 1975; MINIMUM OBSERVED, 2 MG/L MAR. 10, 1975.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 101 TONS (92 TONNES) MAR. 5, 1976; MINIMUM DAILY, 0 TON (0 TONNE) ON MANY DAYS.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 250 MG/L APR. 24; MINIMUM DAILY MEAN, 5 MG/L ON MANY

DAYS. MAXIMUM OBSERVED, 903 MG/L MAR. 27; MINIMUM OBSERVED, 4 MG/L APR. 22.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 101 TONS (92 TONNES) MAR. 27; MINIMUM DAILY, 0 TON (0 TONNE) ON MANY DAYS.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 24, 1975	1350	15.0	0.55	975	June 29, 1976	1235	16.5	0.98	975
Jan. 12, 1976	1510	0.0	1.26	1050	July 22, 1976	1555	20.0	.31	875
Mar. 6, 1976	1430	1.5	71.7	675	Aug. 31, 1976	1435	20.5	.14	825
Apr. 5, 1976	1425	10.0	9.02	925	Sept. 21, 1976	1350	12.0	.15	850
May 19, 1976	1520	15.5	5.58	950					

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
MAR , 1976							
29...	0850	66	224	40	61	70	77
APR							
24...	1340	25	254	17	--	--	--
24...	1740	87	1060	249	--	--	--
24...	2340	152	317	130	--	--	--
25...	0210	135	206	75	--	--	--
25...	0740	82	111	25	--	--	--
MAY							
05...	2330	19	184	9.4	--	--	--
JUL							
30...	2135	5.3	221	3.2	57	72	84
AUG							
31...	1430	.15	19	.01	29	52	64

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
MAR , 1976						
29...	84	90	93	96	98	100
APR						
24...	--	--	96	--	--	--
24...	--	--	93	--	--	--
24...	--	--	92	--	--	--
25...	--	--	95	--	--	--
25...	--	--	87	--	--	--
MAY						
05...	--	--	98	--	--	--
JUL						
30...	94	98	99	100	--	--
AUG						
31...	76	90	95	98	100	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG , 1976												
31...	1330	.15	5	8	14	27	37	45	49	57	80	100

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087050 LITTLE MEMONEE RIVER NEAR FREISTADT, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)
OCTOBER												
1	10	.01	40	.06	76	2.5	10	.05	5	.02	10	.56
2	10	.01	45	.16	60	1.3	10	.05	5	.02	9	.60
3	10	.01	60	.49	40	.66	10	.05	5	.02	9	.78
4	10	.01	40	.22	35	.46	10	.04	5	.02	132	44
5	10	.01	35	.09	30	.40	10	.04	5	.02	224	101
6	25	.03	30	.06	25	.32	7	.02	5	.02	98	17
7	30	.03	30	.05	20	.22	7	.02	5	.02	26	3.3
8	15	.02	70	.23	15	.15	7	.02	5	.02	14	1.3
9	20	.03	80	.54	15	.14	7	.02	5	.02	10	.74
10	40	.05	90	2.2	15	.13	5	.02	5	.02	12	.87
11	40	.05	70	.57	15	.12	5	.02	10	.04	19	1.1
12	50	.07	45	.24	12	.09	5	.02	20	.11	165	37
13	60	.11	35	.13	30	.46	5	.02	49	1.4	96	14
14	60	.12	30	.08	100	.54	5	.02	44	.92	39	3.4
15	100	.30	30	.06	50	1.8	5	.02	68	7.6	16	1.0
16	50	.07	25	.06	40	.97	5	.02	64	3.0	13	.66
17	35	.03	25	.06	30	.49	5	.02	26	.93	13	.52
18	40	.05	25	.06	20	.24	5	.01	76	7.3	13	.50
19	50	.08	39	.13	15	.11	5	.01	24	1.8	13	.54
20	40	.05	61	.36	10	.07	5	.02	17	.82	13	.59
21	28	.04	59	.36	10	.07	5	.02	18	.68	14	.52
22	25	.03	40	.21	10	.06	5	.02	21	.71	14	.39
23	12	.01	28	.12	10	.06	5	.02	24	.73	14	.37
24	52	.05	20	.09	10	.06	5	.02	29	.78	14	.35
25	40	.06	15	.06	10	.06	5	.02	42	1.4	15	.33
26	30	.04	15	.06	10	.06	5	.02	74	6.6	28	1.1
27	25	.04	15	.06	10	.06	5	.02	61	7.2	215	40
28	25	.03	30	.15	10	.05	5	.02	17	1.7	60	4.4
29	20	.03	150	6.1	10	.05	5	.02	12	.92	40	2.3
30	25	.04	130	12	10	.05	5	.02	---	---	28	1.8
31	30	.04	---	---	10	.05	5	.02	---	---	14	.75
MONTH	---	1.55	---	25.12	---	11.82	---	.73	---	44.84	---	281.77

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)
APRIL												
1	9	.40	28	.89	25	.28	20	.05	31	.23	18	.01
2	8	.29	28	.77	25	.23	20	.04	30	.13	17	.01
3	7	.22	29	.70	24	.19	20	.04	30	.08	17	.01
4	7	.20	30	.64	23	.16	19	.04	25	.05	17	0
5	7	.17	73	2.9	23	.14	19	.03	25	.05	17	0
6	8	.17	22	.97	23	.13	19	.03	25	.04	17	0
7	9	.17	10	.28	22	.11	19	.03	20	.03	17	0
8	10	.16	10	.24	22	.10	19	.03	20	.03	16	0
9	11	.16	12	.25	22	.08	19	.03	20	.02	24	.01
10	12	.18	12	.22	21	.08	19	.03	20	.02	24	.01
11	13	.22	12	.19	21	.08	18	.02	20	.02	25	.01
12	15	.21	12	.17	20	.08	18	.02	15	.01	25	0
13	15	.20	12	.16	21	.09	18	.02	12	.01	16	0
14	15	.20	12	.15	40	.40	18	.02	36	.04	17	0
15	46	1.2	17	.32	24	.17	18	.02	20	.02	17	0
16	15	.36	18	.55	21	.10	18	.02	20	.02	17	0
17	12	.24	26	.59	18	.07	18	.02	20	.02	17	0
18	12	.20	31	.52	16	.06	18	.02	20	.02	17	0
19	11	.16	30	.45	19	.07	17	.01	21	.02	28	.01
20	13	.18	28	.39	20	.07	17	.02	21	.01	28	.02
21	14	.27	25	.28	20	.06	17	.02	22	.01	25	.01
22	7	.16	20	.21	24	.07	17	.01	22	.01	20	.01
23	14	.25	15	.14	22	.07	16	.01	22	.01	20	.01
24	250	65	15	.13	20	.06	14	.01	22	.01	20	.01
25	94	24	15	.12	20	.07	13	.01	23	.01	20	.01
26	43	5.2	15	.11	20	.06	12	.01	30	.02	20	.01
27	27	2.1	20	.14	18	.05	11	.01	21	.01	20	.01
28	26	1.4	29	.22	18	.05	13	.01	50	.05	20	.01
29	26	1.1	40	.57	38	.10	18	.02	20	.01	20	.01
30	27	.98	35	.46	23	.07	29	.55	18	.01	20	.01
31	---	---	30	.38	---	---	65	2.2	18	.01	---	---
MONTH	---	105.75	---	14.11	---	3.35	---	3.40	---	1.03	---	.19

TOTAL LOAD FOR YEAR: 493.66 TONS.

04087060 NOYES CREEK AT MILWAUKEE, WI

LOCATION.--LAT 43°08'27", LONG 88°01'30", IN NW 1/4 SW 1/4 SEC.21, T.8 N., R.21 E., MILWAUKEE COUNTY, HYDROLOGIC UNIT 04040003, ON RIGHT BANK, 200 FT (61 M) WEST OF 91ST STREET NEAR THE INTERSECTION OF 91ST STREET AND W. DENVER STREET IN MILWAUKEE, AND 1,000 FT (305 M) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--2.01 MI² (5.21 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--DECEMBER 1974 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER AND CONCRETE WEIR CONTROL. ALTITUDE OF GAGE 710 FT (216 M) FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS ARE FAIR EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE POOR.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 215 FT³/S (6.089 M³/S) MAR. 4, 1976, GAGE HEIGHT, 6.44 FT (1.96 M); MINIMUM, 0.03 FT³/S (0.001 M³/S) SEPT. 7, 8, 1976, GAGE HEIGHT, 2.45 FT (0.75 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 215 FT³/S (6.089 M³/S) MAR. 4, GAGE HEIGHT, 6.44 FT (1.96 M); MINIMUM, 0.03 FT³/S (0.001 M³/S) SEPT. 7, 8, GAGE HEIGHT, 2.45 FT (0.75 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 3-6, DEC. 18 TO FEB. 18.)

2.4	0	3.1	6.8
2.5	0.1	3.3	13
2.6	0.4	3.6	28
2.7	1.0	4.0	51
2.8	1.7	5.0	105
2.9	2.8	6.0	176
3.0	4.6	6.5	221

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.66	.90	.09	.06	1.4	1.4	1.2	.34	.19	.35	.57
2	.15	1.7	.73	.08	.07	14	1.2	1.1	.31	.15	.16	.15
3	.15	1.9	.84	.08	.07	13	.98	1.1	.31	.16	.20	.09
4	.17	.78	.56	.08	.08	73	1.0	.74	.32	.14	.27	.09
5	.14	.51	.79	.08	.09	50	.83	12	.30	.17	1.2	.09
6	.10	.22	.79	.08	.10	19	.73	2.7	.27	.19	.64	.06
7	.15	.76	.26	.08	.10	4.2	.62	1.2	.31	.26	.21	.04
8	.13	.64	.34	.08	.10	2.8	.60	.97	.35	.33	.18	.06
9	.18	2.0	1.2	.09	.11	2.4	.58	.81	.36	.31	.13	4.5
10	.15	8.4	.38	.09	.12	2.1	2.9	3.5	.40	.39	.17	.24
11	.24	.56	.53	.08	.14	1.6	1.4	1.0	.40	.31	.24	.12
12	.34	.39	1.1	.08	.16	28	.65	.72	.32	.28	.27	.10
13	.35	.67	9.8	.09	.18	4.9	.58	.67	.31	.28	.25	.07
14	1.4	.24	5.2	.09	.16	2.5	.52	.63	20	.48	1.2	.08
15	5.2	.24	1.4	.08	.20	1.8	2.0	17	1.0	.68	.24	.09
16	.19	.32	.83	.07	.50	1.3	1.2	3.0	.29	1.1	.09	.08
17	.23	.33	.60	.07	6.0	1.4	1.2	1.1	.26	.36	.11	.08
18	.40	.24	.25	.06	12	1.3	.40	.78	2.7	.30	.12	.07
19	.50	.22	.22	.07	2.4	1.3	.51	.63	.53	.31	.18	2.2
20	.44	2.3	.21	.07	1.9	1.2	2.4	.61	.65	.32	.24	1.2
21	.55	.79	.23	.07	2.4	1.0	4.9	.50	.59	.24	.27	.12
22	.52	.28	.22	.07	2.2	1.2	1.1	.49	.25	.28	.20	.09
23	.51	.16	.20	.06	1.6	1.2	.88	.40	.31	.27	.13	.08
24	.47	.23	.18	.06	5.6	.89	45	.38	.28	.25	.14	.08
25	.48	.34	.15	.06	12	.66	11	.22	.22	.23	.75	.10
26	.43	.19	.12	.06	11	14	2.6	.34	.19	.20	1.7	.08
27	.46	.37	.11	.06	6.9	25	1.9	.34	.22	.23	.25	.07
28	.55	.34	.10	.06	3.0	2.2	1.6	1.6	.31	3.4	5.9	.08
29	.50	23	.10	.07	3.1	2.0	1.4	2.2	.28	.47	.23	.10
30	.53	6.6	.10	.07	---	5.5	1.7	.68	.46	17	.09	.17
31	.50	---	.10	.07	---	1.6	---	.40	---	12	.09	---
TOTAL	16.27	55.38	28.54	2.30	72.34	282.45	93.78	59.01	32.84	41.28	16.20	10.95
MEAN	.52	1.85	.92	.074	2.49	9.11	3.13	1.90	1.09	1.33	.52	.37
MAX	5.2	23	9.8	.09	12	73	45	17	20	17	5.9	4.5
MIN	.10	.16	.10	.06	.06	.66	.40	.22	.19	.14	.09	.04
CFSM	.26	.92	.46	.04	1.24	4.53	1.56	.95	.54	.66	.26	.18
IN.	.30	1.02	.53	.04	1.34	5.22	1.73	1.09	.61	.76	.30	.20
CAL YR 1975	TOTAL	686.99	MEAN	1.88	MAX	44	MIN	.10	CFSM	.94	IN	12.71
WTR YR 1976	TOTAL	711.34	MEAN	1.94	MAX	73	MIN	.04	CFSM	.97	IN	13.16

STREAMS TRIBUTARY TO LAKE MICHIGAN
04887868 NOYES CREEK AT MILWAUKEE, WI--CONTINUED
WATER-QUALITY RECORDS

PERIOD OF RECORD.--JANUARY 1975 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: MARCH 1975 TO CURRENT YEAR.

INSTRUMENTATION.--SEDIMENT PUMPING SAMPLER SINCE MARCH 1, 1975.

REMARKS.--SEDIMENT RECORDS ARE GOOD. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 10 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 331 MG/L MAR. 12, 1976; MINIMUM DAILY MEAN, 4 MG/L AUG. 22, 23, 1976. MAXIMUM OBSERVED, 2,290 MG/L MAR. 26, 1976; MINIMUM OBSERVED, 3 MG/L JULY 23, 1975, JULY 23, 1976.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 105 TONS (95 TONNES) MAR. 4, 1976; MINIMUM DAILY, 0 TON (0 TONNE) ON MANY DAYS.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 331 MG/L MAR. 12; MINIMUM DAILY MEAN, 4 MG/L AUG. 22, 23. MAXIMUM OBSERVED, 2,290 MG/L MAR. 26; MINIMUM OBSERVED, 3 MG/L JULY 23.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 105 TONS (95 TONNES) MAR. 4; MINIMUM DAILY, 0 TON (0 TONNE) ON MANY DAYS.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
July 23, 1976	1520	32.0	0.22	1000	Sept. 9, 1976	1200	19.0	7.04	340

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.				
					% FINER THAN .002 MM	% FINER THAN .004 MM	% FINER THAN .008 MM	% FINER THAN .016 MM	% FINER THAN .031 MM	% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM
MAR. 1976												
12...	1445	98	1740	468	40	53	73	83	93	98	99	100
APR												
24...	0815	4.2	66	.75	--	--	--	--	--	100	--	--
24...	0225	9.7	103	2.7	--	--	--	--	--	99	--	--
24...	0300	18	98	4.8	--	--	--	--	--	99	--	--
24...	0425	14	95	3.6	--	--	--	--	--	100	--	--
MAY												
05...	1720	34	438	48	--	--	--	--	--	95	--	--
05...	1045	72	465	98	--	--	--	--	--	93	--	--
05...	2035	48	156	17	--	--	--	--	--	97	--	--
JUL												
28...	0800	4.4	299	3.6	45	47	70	79	94	98	100	--
28...	1150	6.4	64	1.1	69	76	88	93	96	98	100	--
SEP												
19...	1630	1.7	66	.30	56	68	84	92	95	96	100	--

04087060 NOYES CREEK AT MILWAUKEE, WI--CONTINUED

SUSPENDED--SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11	0	13	.02	30	.07	17	0	15	0	15	.06
2	11	0	30	.14	25	.05	17	0	15	0	160	18
3	11	0	35	.24	20	.05	16	0	15	0	49	2.3
4	11	.01	15	.03	20	.03	16	0	15	0	258	105
5	12	0	10	.01	20	.04	16	0	15	0	48	7.5
6	12	0	11	.01	20	.04	16	0	20	.01	21	1.1
7	12	.01	18	.14	15	.01	16	0	20	.01	27	.38
8	13	0	26	.06	15	.01	16	0	30	.01	36	.35
9	13	.01	52	.73	36	.17	15	0	30	.01	21	.14
10	13	.01	162	10	21	.02	15	0	33	.01	20	.11
11	14	.01	56	.09	20	.03	15	0	29	.01	15	.06
12	14	.01	50	.05	20	.06	15	0	26	.01	331	41
13	15	.01	41	.07	131	5.4	15	0	30	.01	30	.40
14	55	.60	33	.02	45	.96	15	0	38	.02	25	.17
15	63	1.9	27	.02	20	.08	15	0	33	.02	20	.10
16	38	.02	22	.02	20	.04	14	0	30	.04	20	.07
17	30	.02	18	.02	19	.03	14	0	25	.40	53	.26
18	35	.05	15	.01	19	.01	14	0	85	2.8	32	.11
19	45	.05	12	.01	19	.01	14	0	27	.18	20	.07
20	25	.03	90	1.3	19	.01	14	0	17	.08	20	.06
21	15	.02	33	.07	19	.01	14	0	17	.11	20	.05
22	12	.02	20	.02	19	.01	14	0	18	.10	20	.06
23	12	.02	20	.01	18	.01	13	0	19	.08	20	.06
24	12	.02	20	.01	18	.01	13	0	62	1.7	15	.04
25	12	.02	20	.02	18	.01	13	0	113	6.5	15	.03
26	12	.01	20	.01	18	.01	13	0	54	2.5	223	39
27	12	.01	20	.02	18	.01	15	0	26	.61	207	46
28	12	.02	20	.14	17	0	15	0	15	.16	29	.17
29	13	.02	150	9.3	17	0	15	0	38	.40	33	.16
30	13	.02	70	1.2	17	0	15	0	---	---	65	.97
31	13	.02	---	---	17	0	15	0	---	---	30	.13
MONTH	---	2.94	---	23.79	---	7.19	---	0	---	15.78	---	263.91

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	25	.09	29	.09	30	.03	15	.01	16	.02	49	.12
2	20	.06	33	.10	25	.02	15	.01	11	.01	13	.01
3	15	.04	33	.09	20	.02	14	.01	13	.01	12	0
4	15	.04	30	.06	20	.02	13	.01	17	.01	12	0
5	15	.03	123	12	20	.02	13	.01	24	.15	20	.02
6	15	.03	47	.36	15	.01	12	.01	15	.03	11	0
7	15	.03	27	.09	20	.02	12	.01	15	.01	11	0
8	15	.02	24	.06	20	.02	11	.01	15	.01	10	0
9	15	.02	22	.05	25	.02	11	.01	23	.01	50	1.0
10	65	1.4	70	.66	25	.03	10	.01	10	0	20	.02
11	51	.25	22	.06	25	.03	10	.01	10	.01	10	0
12	29	.05	13	.02	20	.02	9	.01	10	.01	10	0
13	24	.04	15	.03	20	.02	9	.01	10	.01	10	0
14	22	.03	18	.03	30	.05	20	.05	17	.07	10	0
15	41	.57	77	5.7	25	.03	41	.16	8	.01	10	0
16	22	.04	42	.41	20	.02	52	.26	7	0	10	0
17	69	.38	31	.09	20	.01	26	.03	6	0	10	0
18	31	.04	32	.07	51	.55	22	.02	6	0	10	0
19	32	.07	33	.06	18	.03	19	.02	5	0	38	.69
20	53	.88	35	.06	57	.10	16	.01	5	0	22	.09
21	64	1.2	36	.05	38	.07	14	.01	5	0	11	0
22	34	.11	30	.04	22	.01	12	.01	4	0	11	0
23	41	.11	25	.03	15	.01	11	.01	4	0	12	0
24	181	33	25	.03	15	.01	6	0	6	0	14	0
25	56	2.1	20	.01	15	.01	8	0	11	.09	16	0
26	42	.29	25	.02	10	.01	10	.01	13	.09	17	0
27	43	.21	25	.02	10	.01	12	.01	11	.01	19	0
28	34	.14	45	.30	15	.01	45	.65	108	3.8	22	0
29	27	.10	60	.36	15	.01	24	.03	13	.01	24	.01
30	27	.13	50	.09	20	.02	169	55	10	0	27	.01
31	---	---	40	.04	---	---	63	5.4	12	0	---	---
MONTH	---	41.50	---	21.08	---	1.24	---	61.81	---	4.37	---	1.97

TOTAL LOAD FOR YEAR: 445.58 TONS.

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087070 LITTLE MEMONONEE RIVER AT MILWAUKEE, WI

LOCATION.--LAT 43°07'28", LONG 88°02'34", IN NW 1/4 SW 1/4 SEC.29, T.8 N., R.21 E., MILWAUKEE COUNTY, HYDROLOGIC UNIT 04040003, ON RIGHT SPOIL BANK ABOUT 200 FT (61 M) FROM BRIDGE ON U.S. HIGHWAY 41, ON MILWAUKEE COUNTY PARK COMMISSION PROPERTY, AT MILWAUKEE, AND 1.6 MI (2.6 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--19.6 MI² (50.8 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--NOVEMBER 1974 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 694.63 FT (211.72 M) ABOVE MEAN SEA LEVEL, (UNIVERSITY OF WISCONSIN BENCHMARK).

REMARKS.--RECORDS ARE GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR. DIVERSIONS FOR IRRIGATION JULY THROUGH SEPTEMBER ABOVE STATION.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 467 FT³/S (13.2 M³/S) MAR. 4, 1976, GAGE HEIGHT, 10.35 FT (3.16 M); MINIMUM, 0.11 FT³/S (0.003 M³/S) SEPT. 8, 1976, GAGE HEIGHT, 4.73 FT (1.44 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 467 FT³/S (13.2 M³/S) MAR. 4, GAGE HEIGHT, 10.35 FT (3.16 M); MINIMUM, 0.11 FT³/S (0.003 M³/S) SEPT. 6, GAGE HEIGHT, 4.73 FT (1.44 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 16 TO FEB. 13.)

4.7	.03	5.5	22
4.6	.39	6.0	51
4.9	1.2	7.0	125
5.0	2.6	8.0	212
5.1	5.3	9.0	310
5.2	8.4	10.0	420

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	2.6	35	2.8	2.3	46	39	22	8.5	1.9	1.3	1.6
2	2.7	20	24	3.0	2.2	65	32	18	7.8	1.7	.92	1.1
3	2.6	13	18	3.1	2.3	102	26	16	7.1	1.4	.81	.81
4	2.8	4.8	11	2.6	2.3	201	23	13	6.8	1.3	.64	.61
5	3.0	3.3	9.4	2.4	2.2	336	20	43	4.3	1.2	1.7	.72
6	3.2	2.7	9.8	2.3	2.2	41	17	34	4.5	1.2	1.1	.45
7	3.4	2.6	8.1	2.3	2.3	159	14	23	4.2	1.7	.50	.24
8	3.6	4.5	7.5	2.3	2.3	98	12	19	3.6	1.0	.44	.20
9	3.4	6.6	8.2	2.1	2.4	71	11	16	3.0	1.0	.38	9.2
10	3.7	39	6.8	2.0	2.5	58	13	17	2.6	1.0	.40	2.0
11	4.0	9.7	6.5	2.0	2.7	46	17	14	2.4	1.1	.46	1.3
12	4.2	6.6	6.9	2.0	3.5	146	12	11	2.2	.99	.59	1.2
13	4.3	5.7	30	2.0	22	149	11	10	2.3	.90	.69	.90
14	5.7	4.2	39	2.0	54	94	11	9.7	36	.78	3.7	.72
15	9.2	4.0	27	2.0	102	64	13	53	4.7	1.1	.67	.72
16	1.9	3.7	20	2.1	89	44	14	36	4.5	1.5	.47	.72
17	1.4	3.6	12	2.0	63	48	15	23	4.3	.61	.57	.72
18	2.0	3.4	6.6	1.8	120	29	12	18	6.6	.43	.54	.77
19	2.8	3.2	4.4	1.8	60	29	11	15	4.9	.34	.64	3.2
20	2.1	6.4	4.4	2.0	57	28	12	13	3.7	.39	.74	3.0
21	2.0	4.5	4.2	2.0	48	27	21	11	3.7	.38	.74	1.1
22	1.9	3.4	3.9	2.1	43	21	18	6.2	3.4	.29	.66	.82
23	1.9	3.1	3.9	2.0	35	17	15	7.8	3.3	.32	.56	.59
24	2.2	2.9	3.7	2.2	36	16	154	7.2	3.5	.37	.46	.54
25	2.0	4.9	3.5	2.2	53	15	209	6.4	3.6	.36	.80	.40
26	2.3	2.7	3.5	2.2	80	27	124	5.9	2.7	.44	3.8	.42
27	2.2	2.8	3.5	2.2	64	162	76	5.9	2.4	.40	.83	.28
28	1.9	3.0	3.3	2.2	73	74	50	10	2.8	3.5	12	.21
29	2.3	71	3.1	2.3	62	52	35	19	2.2	.92	1.3	.25
30	.53	63	2.9	2.4	---	59	26	11	3.1	16	1.1	.30
31	.55	---	2.6	2.4	---	45	---	10	---	31	.86	---
TOTAL	88.26	311.1	333.1	68.6	1130.2	2371	1065	526.1	154.9	75.52	40.39	35.09
MEAN	2.85	10.4	10.7	2.22	39.0	76.5	35.5	17.0	5.16	2.44	1.30	1.17
MAX	9.2	71	39	3.1	120	336	209	53	36	31	12	9.2
MIN	.53	2.6	2.8	1.8	2.2	15	11	5.9	2.2	.29	.38	.20
CFSM	.15	.53	.54	.11	1.99	3.90	1.81	.87	.26	.12	.07	.06
IN.	.17	.59	.63	.13	2.14	4.49	2.02	1.00	.29	.14	.06	.07
CAL YR 1975 TOTAL	6200.68			MEAN 17.0	MAX 267	MIN .53	CFSM .87	IN 11.74				
WTR YR 1976 TOTAL	6199.48			MEAN 16.9	MAX 336	MIN .20	CFSM .86	IN 11.74				

04087070 LITTLE MEMOMONEE RIVER AT MILWAUKEE, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1975 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: MARCH 1975 TO CURRENT YEAR.

INSTRUMENTATION.--SEDIMENT PUMPING SAMPLER SINCE MARCH 1, 1975.

REMARKS.--SEDIMENT RECORDS ARE GOOD. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 10 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 1.070 MG/L AUG. 22, 1975; MINIMUM DAILY MEAN, 6 MG/L MAR. 6, 1975. MAXIMUM OBSERVED, 3,530 MG/L JULY 31, 1976; MINIMUM OBSERVED, 6 MG/L MAR. 5, 1975, MAR. 4, 1976.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 343 TONS (311 TONNES) MAR. 12, 1976; MINIMUM DAILY, 0.01 TON (0.01 TONNE) SEPT. 7, 8, 27, 28, 29, 1976.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 601 MG/L JULY 31; MINIMUM DAILY MEAN, 12 MG/L SEPT. 8. MAXIMUM OBSERVED, 3,530 MG/L JULY 31; MINIMUM OBSERVED, 6 MG/L MAR. 4.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 343 TONS (311 TONNES) MAR. 12; MINIMUM DAILY, .01 TON (.01 TONNE) SEPT. 7, 8, 27-29.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 16, 1975	1605	12.5	1.57	700	May 18, 1976	1645	15.5	17.2	1040
Oct. 20, 1975	1410	10.5	1.95	700	June 29, 1976	1315	20.0	2.47	700
Nov. 25, 1975	1545	0.0	3.50	3500	July 27, 1976	1005	22.0	.40	950
Jan. 20, 1976	1135	0.0	1.91	1350	Aug. 4, 1976	1115	18.5	.59	1120
Feb. 20, 1976	1435	2.0	44.8	1100	Sept. 13, 1976	1400	19.5	.77	750
Apr. 6, 1976	1325	11.0	17.4	875					

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM
FEB , 1976												
18...	1635	131	247	87	62	76	86	93	96	98	100	--
MAR												
27...	0600	256	763	527	--	--	--	--	--	99	--	--
APR												
24...	0630	37	153	15	--	--	--	--	--	98	--	--
24...	2215	347	328	307	--	--	--	--	--	99	--	--
25...	1430	187	108	55	--	--	--	--	--	98	--	--
JUL												
28...	1200	10	129	3.5	54	69	80	91	96	98	99	100
30...	2130	88	1140	271	57	72	84	96	99	100	--	--
31...	0345	88	1220	290	69	84	94	99	100	--	--	--
SEP												
15...	1215	.72	18	.03	73	84	93	96	98	99	100	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
SEP , 1976											
15...	1235	.72	16	29	53	82	90	92	94	97	100

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087070 LITTLE MEMONEE RIVER AT MILWAUKEE, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	68	.47	54	.38	30	2.8	51	.39	29	.18	24	3.0
2	79	.58	218	25	30	1.9	45	.36	29	.17	27	6.2
3	79	.55	147	6.2	69	4.5	45	.38	29	.18	33	10
4	92	.70	65	.86	38	1.1	51	.36	29	.18	87	76
5	82	.67	48	.43	58	1.5	56	.36	29	.17	90	82
6	51	.43	34	.24	78	2.1	61	.38	29	.17	73	47
7	51	.47	24	.17	73	1.6	60	.37	29	.18	53	23
8	43	.42	58	.70	62	1.3	56	.35	30	.19	30	8.0
9	63	.58	74	1.8	72	1.6	52	.29	30	.19	25	4.9
10	68	.67	214	57	90	1.6	47	.25	30	.20	25	3.9
11	70	.75	35	.91	74	1.3	45	.24	30	.22	25	3.2
12	38	.43	46	.83	47	.86	41	.22	131	1.2	596	343
13	31	.37	60	.91	237	33	39	.21	68	4.0	163	72
14	35	.60	78	.89	85	9.1	38	.21	34	5.0	49	13
15	106	5.1	86	.93	40	3.5	38	.21	235	81	39	6.6
16	22	.11	64	.64	45	2.9	38	.22	158	43	33	3.9
17	26	.09	75	.73	78	2.5	37	.20	57	10	26	3.4
18	31	.17	58	.54	99	1.8	37	.18	292	138	27	2.1
19	37	.28	55	.49	127	1.5	36	.17	75	16	81	6.3
20	18	.10	80	1.5	162	1.9	35	.19	40	6.2	83	6.3
21	20	.11	28	.34	144	1.6	23	.12	30	3.9	64	4.6
22	26	.13	36	.33	123	1.3	25	.14	20	2.3	44	2.5
23	24	.13	45	.37	63	.66	19	.10	20	1.9	47	2.2
24	38	.23	56	.43	71	.71	16	.10	25	2.2	45	2.0
25	40	.22	62	.93	78	.74	32	.19	58	12	43	1.7
26	55	.34	55	.40	57	.54	30	.18	80	21	139	37
27	38	.23	46	.34	53	.50	28	.17	68	15	463	270
28	43	.22	35	.29	41	.36	28	.17	48	9.4	81	17
29	44	.28	301	.80	54	.45	29	.18	36	6.1	56	8.1
30	58	.30	88	.17	48	.38	29	.19	---	---	111	20
31	50	.31	---	---	44	.33	29	.19	---	---	57	7.0
MONTH	---	102.17	---	201.58	---	85.93	---	7.27	---	380.23	---	1095.90

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	48	4.9	38	2.2	30	.68	34	.18	50	.18	22	.10
2	79	6.6	43	2.1	25	.53	31	.14	30	.07	21	.06
3	92	6.7	41	1.8	25	.47	38	.15	30	.07	22	.05
4	66	4.1	42	1.5	25	.46	40	.14	28	.05	23	.04
5	72	3.9	202	59	25	.30	40	.13	78	.42	30	.08
6	62	2.9	125	15	25	.30	40	.13	60	.19	25	.03
7	64	2.5	42	2.6	25	.29	65	.30	30	.04	17	.01
8	73	2.4	46	2.3	25	.24	42	.12	30	.04	12	.01
9	79	2.4	40	1.7	25	.20	40	.11	30	.03	75	2.0
10	93	4.0	106	4.9	25	.19	42	.12	35	.04	30	.18
11	82	4.3	70	2.8	25	.16	44	.13	35	.05	21	.07
12	57	1.8	40	1.1	25	.15	33	.09	45	.07	18	.06
13	56	1.7	35	.92	25	.16	24	.06	43	.08	17	.04
14	57	1.6	30	.82	208	32	20	.04	102	1.3	17	.03
15	57	2.0	184	49	70	.89	94	.27	40	.07	18	.03
16	55	2.1	73	8.9	60	.73	85	.40	20	.03	18	.03
17	54	2.1	63	3.8	50	.58	46	.08	25	.04	19	.04
18	55	1.9	66	3.2	45	.88	28	.03	28	.04	19	.04
19	51	1.5	60	2.4	40	.54	28	.03	25	.04	52	1.0
20	85	3.4	50	1.8	40	.40	31	.03	20	.04	58	.68
21	82	5.4	40	1.2	37	.36	29	.03	20	.04	22	.07
22	61	3.0	35	.77	29	.26	26	.02	20	.04	20	.04
23	48	2.0	30	.63	26	.23	24	.02	25	.04	15	.02
24	367	195	25	.49	25	.23	23	.02	25	.03	15	.02
25	196	117	20	.35	29	.28	25	.02	33	.09	15	.02
26	89	30	20	.32	34	.25	28	.03	88	1.1	15	.02
27	65	13	20	.32	34	.22	42	.04	39	.09	15	.01
28	48	6.5	79	2.2	32	.24	61	.69	180	10	15	.01
29	36	3.5	64	3.8	30	.18	39	.10	86	.31	15	.01
30	33	2.4	46	1.3	36	.30	188	.48	37	.11	20	.02
31	---	---	35	.94	---	---	601	141	22	.05	---	---
MONTH	---	440.60	---	180.16	---	42.70	---	192.65	---	14.79	---	4.82

TOTAL LOAD FOR YEAR: 2748.80 TONS.

04087088 UNDERWOOD CREEK AT MAUWATOSA, WI

LOCATION.--LAT 43°03'17", LONG 88°02'46", IN SW 1/4 NW 1/4 SEC.20, T.7 N., R.21 E., MILWAUKEE COUNTY, HYDROLOGIC UNIT 04040003, AT U.S. HIGHWAY 45, ON THE NORTHEAST CORNER OF BRIDGE ON THE CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC RAILROAD, ON MILWAUKEE COUNTY PARK COMMISSION PROPERTY, AT MAUWATOSA, AND 0.8 MI (1.3 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--18.1 MI² (46.9 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--DECEMBER 1974 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER AND CONCRETE WEIR. ALTITUDE OF GAGE IS 690 FT (210 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD WHICH ARE FAIR.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 540 FT³/S (15.3 M³/S) FEB. 24, 1975, GAGE HEIGHT, 4.34 FT (1.32 M); MINIMUM, 1.00 FT³/S (0.028 M³/S) NOV. 23, 25, 1975, SEPT. 23, 1976, GAGE HEIGHT, 2.42 FT (0.738 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 388 FT³/S (11.0 M³/S) APR. 24, GAGE HEIGHT, 4.14 FT (1.26 M); MINIMUM, 1.00 FT³/S (0.028 M³/S) NOV. 23, 25, SEPT. 23, GAGE HEIGHT, 2.42 FT (0.738 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 18 TO FEB. 10.)

2.4	1.1	2.9	28
2.5	2.8	3.1	57
2.6	5.3	3.4	120
2.7	8.9	3.7	216

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	1.7	6.3	2.5	1.8	22	19	12	5.3	3.1	2.2	9.5
2	1.9	2.1	4.3	2.4	1.7	56	15	11	4.5	3.2	2.0	1.6
3	2.0	7.6	3.7	2.6	1.8	77	13	9.4	5.1	2.6	1.9	1.8
4	2.0	3.2	3.6	2.5	1.8	80	12	8.2	3.9	2.4	1.9	1.9
5	1.8	2.2	3.0	2.4	1.8	206	11	56	3.6	2.7	3.4	1.7
6	2.0	2.1	2.7	2.3	1.9	71	10	79	3.5	3.0	1.9	1.6
7	2.2	6.1	2.4	2.1	1.9	50	9.0	28	3.6	2.4	1.7	1.9
8	2.1	2.9	2.5	1.9	2.0	38	8.4	20	3.7	2.6	1.6	2.1
9	2.0	4.7	3.3	1.8	2.2	31	8.3	16	3.7	2.5	1.8	3.4
10	1.8	19	2.7	1.7	3.0	27	13	17	3.6	2.6	2.2	2.5
11	1.6	3.0	3.1	1.7	5.1	22	16	15	3.5	2.8	2.3	2.2
12	1.5	2.1	3.5	1.9	12	66	8.2	14	3.4	2.7	2.4	1.8
13	1.7	1.8	12	1.7	12	58	7.6	11	3.3	2.9	2.3	2.0
14	4.3	1.5	23	1.6	6.0	38	7.7	8.9	27	2.3	11	2.1
15	18	1.6	8.6	1.5	39	27	8.5	46	4.4	2.0	2.0	1.7
16	2.3	1.4	5.6	1.7	36	23	9.6	35	3.4	1.7	2.2	1.9
17	2.0	1.5	4.7	1.5	40	17	13	18	3.1	1.8	2.3	1.9
18	1.8	1.5	4.0	1.3	80	17	7.3	12	17	1.5	2.6	1.8
19	1.6	1.7	3.5	1.3	26	17	6.6	9.6	5.1	1.7	2.4	7.4
20	1.7	4.7	3.2	1.4	17	19	11	8.9	2.9	2.1	2.6	3.3
21	1.8	3.0	3.0	1.5	13	14	26	7.5	2.7	2.0	2.6	1.6
22	1.8	1.8	2.8	1.6	12	11	16	6.6	2.9	1.8	2.2	1.9
23	2.0	1.5	2.7	1.6	11	11	9.8	6.3	3.1	2.0	2.4	1.5
24	1.9	1.6	2.7	1.5	23	10	110	5.9	3.4	2.6	2.5	1.8
25	1.5	1.7	2.6	1.6	46	8.7	121	6.0	3.2	1.6	4.0	2.0
26	1.5	1.8	2.5	1.7	59	24	44	5.7	2.7	1.8	6.0	1.6
27	1.9	2.4	2.4	1.7	54	100	27	5.4	2.8	2.1	2.2	1.8
28	1.6	2.1	2.4	1.7	39	33	21	12	3.3	8.2	28	1.7
29	1.6	4.4	2.5	1.8	33	26	17	17	2.7	2.4	2.1	1.7
30	1.9	3.4	2.6	1.8	---	37	13	7.0	3.3	8.6	1.7	2.3
31	1.7	---	2.5	1.8	---	22	---	6.2	---	20	1.7	---
TOTAL	75.4	185.2	134.4	56.1	585.0	1258.7	619.0	520.6	143.9	101.9	108.1	102.6
MEAN	2.43	6.17	4.34	1.81	20.2	40.6	20.6	16.8	4.80	3.29	3.49	3.42
MAX	18	44	23	2.6	60	206	121	79	27	20	28	34
MIN	1.5	1.4	2.4	1.3	1.7	8.7	6.6	5.4	2.7	1.5	1.6	1.5
CFSM	.13	.34	.24	.10	1.11	2.24	1.14	.93	.26	.18	.19	.19
IN.	.15	.38	.28	.12	1.20	2.58	1.27	1.07	.30	.21	.22	.21
CAL YR 1975	TOTAL	5001.4	MEAN 13.7	MAX 254	MIN 1.4	CFSM .76	IN 10.26					
WTR YR 1976	TOTAL	3890.9	MEAN 10.6	MAX 206	MIN 1.3	CFSM .58	IN 7.98					

04087088 UNDERWOOD CREEK AT WAUWATDSA, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TDNS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)										
1	7	.04	9	.04	22	.37	15	.10	20	.10	8	.47
2	7	.04	57	6.1	26	.30	15	.10	20	.09	66	11
3	7	.04	39	.89	31	.30	20	.14	25	.12	52	11
4	8	.04	38	.31	36	.36	20	.14	30	.15	55	12
5	8	.04	63	.38	41	.34	25	.16	30	.15	80	49
6	8	.04	32	.18	37	.27	30	.19	25	.13	72	14
7	8	.05	23	.79	31	.20	25	.14	25	.13	38	5.2
8	8	.05	19	.16	26	.18	25	.13	25	.14	30	3.1
9	9	.05	35	.59	30	.27	25	.12	23	.19	30	2.5
10	9	.04	65	6.1	20	.15	20	.09	60	1.9	25	1.8
11	9	.04	32	.26	16	.13	20	.09	27	.38	21	1.3
12	10	.04	35	.20	14	.13	15	.08	22	.68	139	29
13	12	.06	34	.16	44	1.9	15	.07	17	.59	57	9.4
14	20	.46	31	.12	54	4.1	15	.06	14	.22	36	3.6
15	64	5.2	29	.12	25	.58	15	.06	116	15	38	2.9
16	14	.09	27	.10	26	.39	20	.09	50	8.5	17	1.1
17	11	.06	25	.10	26	.33	25	.10	74	8.2	26	1.2
18	9	.04	23	.09	25	.27	25	.09	93	20	16	.75
19	8	.04	21	.10	25	.24	25	.09	30	2.3	13	.59
20	7	.04	40	.73	20	.17	25	.09	20	.92	27	1.6
21	6	.03	27	.22	15	.12	25	.10	20	.70	25	.94
22	6	.03	32	.15	15	.11	25	.11	20	.65	25	.74
23	5	.03	38	.15	15	.11	25	.11	20	.59	20	.60
24	5	.03	43	.18	15	.11	25	.10	45	4.4	40	1.1
25	6	.02	36	.17	15	.11	25	.11	92	16	40	.94
26	6	.02	28	.14	15	.10	24	.11	79	15	167	47
27	6	.03	22	.14	15	.10	24	.11	43	6.1	190	74
28	7	.03	17	.10	10	.06	20	.09	14	1.5	29	2.7
29	7	.03	132	20	10	.07	20	.10	31	3.2	28	2.0
30	8	.04	65	8.8	10	.07	20	.10	---	---	51	6.3
31	9	.04	---	---	10	.07	20	.10	---	---	23	1.4
MONTH	---	6.83	---	47.57	---	12.01	---	3.27	---	108.03	---	299.23

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)										
1	25	1.3	15	.49	34	.49	39	.32	30	.18	43	1.7
2	27	1.1	15	.45	32	.39	30	.29	29	.16	39	.17
3	26	.90	15	.38	35	.53	19	.13	25	.12	25	.12
4	24	.80	15	.33	20	.22	17	.11	11	.06	20	.10
5	22	.66	169	81	21	.21	15	.10	31	.32	15	.07
6	21	.56	100	21	22	.21	13	.10	16	.08	15	.06
7	19	.46	75	5.5	23	.24	11	.07	14	.07	10	.05
8	18	.40	62	3.4	24	.24	10	.07	13	.05	10	.06
9	16	.37	51	2.3	25	.25	9	.06	12	.06	166	31
10	32	2.9	61	3.5	26	.26	8	.05	10	.06	4	.03
11	38	2.2	30	1.3	27	.26	10	.08	9	.06	5	.03
12	22	.49	31	1.2	28	.26	10	.07	10	.07	7	.03
13	26	.53	32	.95	33	.36	10	.08	10	.06	8	.05
14	21	.44	31	.74	246	30	5	.03	146	9.8	14	.10
15	22	.52	443	91	56	.67	6	.03	12	.07	11	.05
16	23	.69	123	13	50	.47	7	.03	8	.05	13	.06
17	51	2.4	36	1.8	45	.38	8	.04	12	.08	15	.08
18	20	.39	30	.95	198	24	9	.04	20	.14	17	.08
19	19	.34	30	.75	49	.73	11	.05	19	.12	23	.46
20	31	1.8	25	.60	36	.28	13	.07	16	.11	9	.10
21	78	7.9	30	.61	31	.23	16	.08	13	.09	6	.03
22	29	1.3	30	.53	25	.19	18	.09	11	.07	6	.03
23	52	1.4	30	.51	19	.16	25	.14	14	.10	6	.02
24	112	32	30	.48	15	.14	40	.30	20	.13	6	.03
25	55	20	35	.57	15	.12	19	.09	62	.67	6	.03
26	19	2.3	44	.68	15	.11	18	.08	37	.98	6	.03
27	18	1.3	36	.53	25	.29	16	.09	21	.12	7	.03
28	15	.85	126	8.4	62	.54	156	9.6	147	31	7	.03
29	15	.69	90	6.4	37	.28	10	.07	25	.14	7	.03
30	15	.53	39	.73	59	.54	200	34	25	.11	7	.04
31	---	---	36	.61	---	---	233	40	24	.11	---	---
MONTH	---	87.52	---	250.69	---	63.05	---	86.36	---	45.24	---	34.70

TOTAL LOAD FOR YEAR: 1044.50 TONS.

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087119 HONEY CREEK AT WAUWATOSA, WI

LOCATION.--LAT 43°02'38", LONG 88°00'10", IN NW 1/4 NW 1/4 SEC.27, T.7 N., R.21 E., MILWAUKEE COUNTY, HYDROLOGIC UNIT 04040003, ON RIGHT BANK IN HONEY CREEK PARKWAY, ON MILWAUKEE COUNTY PARK COMMISSION PROPERTY, 150 FT (46 M) WEST OF INTERSECTION OF HONEY CREEK PARKWAY AND 72ND STREET, AT WAUWATOSA, AND 260 FT (79 M) UPSTREAM FROM MENOMONEE RIVER.

DRAINAGE AREA.--10.3 MI² (26.7 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--DECEMBER 1974 TO CURRENT YEAR.

REVISED RECORD.--WATER-STAGE RECORDER AND CONCRETE CONTROL. ALTITUDE OF GAGE IS 630.86 (192.286 M) ABOVE MEAN SEA LEVEL.

REMARKS.--RECORDS 6000 EXCEPT THOSE FOR WINTER PERIODS WHICH WERE AFFECTED BY ICE, WHICH ARE FAIR.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 1,050 FT³/S (29.7 M³/S) MAR. 4, 1976, GAGE HEIGHT, 16.19 FT (4.93 M); MINIMUM, 0.80 FT³/S (0.023 M³/S) SEPT. 6, 16, 1976, GAGE HEIGHT, 10.53 FT (3.21 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 1,050 FT³/S (29.7 M³/S) MAR. 4, 1976, GAGE HEIGHT, 16.19 FT (4.93 M); MINIMUM, 0.80 FT³/S (0.023 M³/S) SEPT. 6, 16, 1976, GAGE HEIGHT, 10.53 FT (3.21 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 18, 24, DEC. 30 TO FEB. 9.)

10.5	.57	11.0	13
10.6	1.5	11.2	24
10.7	2.9	11.5	48
10.8	5.0	12.0	109
10.9	8.2	13.0	265

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	4.1	3.9	1.3	.53	5.7	4.8	4.2	2.5	1.8	1.5	16
2	1.6	23	3.1	1.5	.60	8.1	3.3	4.0	2.5	2.1	1.3	1.5
3	1.6	6.5	2.5	1.6	.64	52	2.7	3.6	2.6	1.5	1.5	1.3
4	1.4	2.3	2.6	.80	.78	304	3.1	2.1	2.5	1.2	2.1	1.1
5	1.3	1.9	2.6	.62	.74	145	2.1	132	2.0	1.2	3.7	.92
6	1.8	1.9	2.1	.58	.67	20	2.0	46	1.5	1.5	2.2	.81
7	2.3	6.5	1.5	.56	.52	10	1.7	10	2.0	2.1	1.3	1.6
8	2.0	3.1	2.5	.56	.70	6.7	1.6	6.0	2.4	2.2	1.0	1.6
9	2.1	7.5	4.5	.54	5.0	5.9	1.6	4.1	2.3	2.6	1.8	69
10	2.0	22	2.3	.58	53	5.7	20	4.9	3.0	2.1	2.1	2.3
11	1.6	2.1	3.2	.60	22	4.3	6.9	3.3	2.3	1.4	2.3	1.4
12	1.2	1.8	5.3	.64	29	39	2.3	3.0	2.4	1.8	2.2	1.1
13	1.9	1.9	20	.60	13	12	2.8	2.9	2.7	1.9	2.3	1.1
14	4.6	1.9	22	.60	4.6	7.5	2.4	2.8	35	2.4	34	1.4
15	26	1.7	6.1	.62	32	5.6	6.9	61	2.6	2.1	1.7	1.1
16	1.7	1.6	3.2	.62	57	4.4	2.8	10	2.1	2.4	1.7	1.0
17	1.6	2.1	2.0	.60	19	3.1	18	4.8	2.1	1.4	1.8	1.2
18	1.3	2.2	1.8	.56	63	2.6	2.6	3.2	32	1.2	1.8	1.0
19	1.1	2.3	1.6	.58	9.0	2.8	2.1	2.8	4.0	2.3	2.1	11
20	1.7	12	1.4	.60	5.9	4.4	9.0	2.8	2.6	2.3	2.3	2.6
21	2.0	4.1	1.4	.60	8.6	4.2	24	2.5	2.2	1.7	2.1	1.3
22	2.0	2.0	1.3	.59	8.2	3.8	6.2	2.1	2.1	1.8	1.7	1.2
23	2.1	1.3	1.3	.62	6.8	3.6	3.9	1.9	2.0	14	1.9	1.3
24	2.3	2.1	1.2	.60	24	3.1	250	1.8	2.5	3.1	2.1	1.3
25	1.7	3.1	1.2	.52	46	2.4	109	2.1	2.0	1.3	10	1.1
26	1.1	2.2	1.2	.66	30	63	19	2.1	1.6	2.8	9.5	1.2
27	1.7	2.3	1.1	.62	17	133	8.9	2.1	1.7	1.8	2.3	1.1
28	2.0	2.0	.97	.56	9.1	13	6.7	17	2.7	17	56	1.1
29	1.9	76	.60	.62	8.2	7.9	5.3	15	2.2	2.1	1.8	1.3
30	2.0	34	.70	.62	---	2.9	4.4	3.6	3.3	29	1.7	1.1
31	1.8	---	.80	.58	---	7.7	---	2.8	---	26	1.6	---
TOTAL	80.9	237.5	105.97	21.25	475.50	893.4	536.1	366.5	133.4	137.3	161.4	131.03
MEAN	2.61	7.92	3.42	.69	16.4	28.8	17.9	11.8	4.45	4.43	5.21	4.37
MAX	26	76	22	1.6	63	304	250	132	35	29	56	69
MIN	1.1	1.3	.60	.52	.52	2.4	1.6	1.8	1.5	1.2	1.0	.81
CFSM	.25	.77	.33	.07	1.59	2.80	1.74	1.15	.43	.43	.51	.42
IN.	.29	.86	.38	.08	1.72	3.23	1.94	1.32	.48	.50	.58	.47
CAL YR 1975 TOTAL	2029.47			MEAN 7.75	MAX 214	MIN .60	CFSM .75	IN 10.22				
WTR YR 1976 TOTAL	3280.25			MEAN 8.96	MAX 304	MIN .52	CFSM .87	IN 11.85				

04087119 HONEY CREEK AT WAUWATOSA, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--APRIL 1973 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: MARCH 1975 TO CURRENT YEAR.

INSTRUMENTATION.--SEDIMENT PUMPING SAMPLER SINCE MARCH 1, 1975.

REMARKS.--SEDIMENT RECORDS ARE GOOD. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 10 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 414 MG/L APR. 28, 1975; MINIMUM DAILY MEAN, 1 MG/L JULY 30, SEPT. 12-14, 1975, SEPT. 21, 27, 28, 1976. MAXIMUM OBSERVED, 2,180 MG/L APR. 30, 1975; MINIMUM OBSERVED, 1 MG/L ON SEVERAL DAYS.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 365 TONS (331 TONNES) APR. 28, 1975; MINIMUM DAILY, 0 TON (0 TONNE) SEPT. 13, 14, 1975, SEPT. 21, 27, 28, 1976.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 400 MG/L FEB. 9; MINIMUM DAILY MEAN, 1 MG/L SEPT. 21, 27, 28. MAXIMUM OBSERVED, 1,200 MG/L AUG. 14; MINIMUM OBSERVED, 1 MG/L MAR. 10, SEPT. 20, 27.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 209 TONS (190 TONNES) MAR. 4; MINIMUM DAILY, 0 TON (0 TONNE) SEPT. 21, 27, 28.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 8, 1975	1015	14.5	1.39	470	May 13, 1976	1250	12.0	3.14	1550
Dec. 29, 1975	1405	0.0	.60	2800	June 15, 1976	1550	22.5	2.06	1180
Feb. 27, 1976	1300	5.5	13.3	2400	July 27, 1976	1230	23.0	1.22	850
Apr. 13, 1976	1155	10.5	1.98	1280					

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN	SUS. SED. FALL DIAM. % FINER THAN	SUS. SED. FALL DIAM. % FINER THAN
					.002 MM	.004 MM	.008 MM
FEB , 1976							
	09...	1605	13	1020	36	86	95
	12...	1503	80	796	172	49	56
APR							
	21...	1945	31	220	18	--	--
	24...	1550	674	401	730	--	--
JUL							
	28...	0850	105	389	110	29	42
	28...	1220	138	31	12	59	70
SEP							
	19...	1815	54	226	33	46	59
	19...	2040	39	98	10	59	74

DATE	SUS. SED. FALL DIAM. % FINER THAN	SUS. SED. FALL DIAM. % FINER THAN	SUS. SED. SIEVE DIAM. % FINER THAN			
	.016 MM	.031 MM	.062 MM	.125 MM	.250 MM	.500 MM
FEB , 1976						
	98	99	100	--	--	--
	80	88	94	97	99	100
APR						
	--	--	98	--	--	--
	--	--	81	--	--	--
JUL						
	73	87	94	97	98	100
	90	94	97	100	--	--
SEP						
	84	90	95	97	100	--
	94	96	98	100	--	--

STREAMS TRIBUTARY TO LAKE MICHIGAN
04067119 HONEY CREEK AT WAUWATOSA, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)	
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	3	.01	61	1.3	18	.19	10	.04	5	.01	10	.17
2	3	.01	83	10	15	.12	10	.04	10	.02	66	17
3	3	.01	93	2.5	12	.08	15	.06	15	.03	31	6.0
4	4	.02	22	.15	21	.18	10	.02	20	.04	136	209
5	4	.01	13	.07	3	.02	7	.01	30	.06	54	31
6	4	.02	12	.06	3	.01	7	.01	25	.05	25	1.5
7	4	.03	50	2.3	5	.02	7	.01	25	.04	17	.46
8	5	.02	42	.43	45	.37	7	.01	30	.06	19	.38
9	5	.03	90	4.0	46	.63	7	.01	400	5.4	12	.21
10	6	.03	60	12	25	.15	5	.01	190	40	3	.04
11	7	.03	22	.12	27	.28	5	.01	66	3.9	5	.06
12	8	.03	16	.08	41	.79	5	.01	132	20	91	16
13	9	.05	12	.06	41	2.6	5	.01	44	1.8	17	.56
14	16	.26	9	.05	27	2.9	5	.01	40	.50	19	.38
15	51	12	7	.03	15	.28	5	.01	221	29	16	.24
16	20	.09	5	.02	11	.10	5	.01	70	19	14	.17
17	19	.08	4	.02	12	.07	5	.01	43	2.5	10	.08
18	18	.07	3	.02	10	.05	5	.01	187	40	12	.08
19	17	.05	6	.04	10	.04	5	.01	99	2.6	15	.11
20	16	.08	89	8.2	10	.04	5	.01	16	.30	38	.66
21	16	.08	35	.44	10	.04	5	.01	93	2.5	14	.15
22	15	.08	19	.10	10	.04	5	.01	51	1.2	10	.10
23	15	.08	11	.04	10	.04	5	.01	55	1.1	10	.10
24	14	.09	12	.08	10	.03	5	.01	66	6.5	15	.13
25	13	.06	22	.21	10	.03	5	.01	77	14	10	.06
26	13	.04	21	.12	10	.03	5	.01	36	3.3	120	140
27	12	.06	15	.10	10	.03	5	.01	25	1.2	212	146
28	12	.07	12	.07	7	.02	5	.01	22	.55	22	.81
29	11	.06	338	132	7	.01	5	.01	29	.77	22	.50
30	11	.06	132	42	7	.01	5	.01	---	---	70	11
31	10	.05	---	---	7	.02	5	.01	---	---	14	.33
MONTH	---	13.66	---	216.61	---	9.22	---	.43	---	196.43	---	583.28

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)	
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	15	.19	10	.11	12	.08	3	.02	11	.05	26	4.0
2	10	.09	10	.11	11	.07	3	.02	10	.04	4	.02
3	10	.07	10	.10	10	.07	2	.01	16	.07	4	.01
4	10	.08	8	.06	10	.07	2	.01	12	.07	5	.02
5	10	.06	125	193	10	.05	2	.01	15	.15	5	.01
6	10	.05	40	7.4	10	.04	6	.03	12	.07	6	.01
7	10	.05	18	.49	10	.05	19	.11	13	.05	7	.03
8	10	.04	15	.25	10	.06	19	.11	14	.04	7	.03
9	10	.04	13	.14	10	.06	18	.12	14	.07	65	32
10	42	9.1	17	.32	10	.08	17	.09	18	.10	13	.08
11	45	1.6	9	.08	10	.06	16	.06	9	.05	13	.05
12	18	.12	8	.06	10	.06	16	.08	4	.02	12	.04
13	30	.22	13	.10	12	.11	15	.08	6	.04	12	.04
14	26	.17	12	.09	73	23	14	.09	58	10	12	.05
15	53	3.4	46	14	7	.05	14	.08	15	.07	11	.04
16	15	.12	12	.37	15	.09	13	.08	10	.05	11	.03
17	101	12	9	.12	13	.07	12	.05	10	.05	11	.04
18	25	.17	7	.06	73	26	12	.04	10	.05	10	.03
19	20	.12	5	.04	14	.17	11	.07	11	.06	26	2.3
20	68	4.0	4	.03	10	.07	11	.07	11	.07	3	.03
21	97	12	6	.04	9	.05	10	.05	12	.07	1	0
22	22	.42	7	.04	9	.05	12	.06	12	.06	2	.01
23	28	.38	9	.05	8	.05	36	6.8	13	.07	2	.01
24	160	183	11	.06	20	.14	16	.20	14	.08	3	.01
25	68	25	18	.11	8	.04	8	.03	32	7.4	5	.01
26	18	.97	24	.15	7	.03	7	.04	43	4.4	5	.02
27	15	.37	15	.08	7	.03	4	.02	13	.08	1	0
28	13	.23	64	9.1	20	.15	31	5.4	48	12	1	0
29	11	.16	28	2.0	20	.12	12	.07	10	.05	2	.01
30	10	.12	20	.26	10	.09	46	24	3	.01	3	.01
31	---	---	15	.12	---	---	31	8.0	7	.03	---	---
MONTH	---	254.34	---	228.94	---	51.06	---	45.90	---	35.42	---	38.94

TOTAL LOAD FOR YEAR: 1674.23 TONS.

04087120 MEMPHONEE RIVER AT WAUWATOSA, WI

LOCATION.--LAT 43°02'44", LONG 87°59'59", IN NE 1/4 NW 1/4 SEC.27, T.7 N.; R.21 E., MILWAUKEE COUNTY, HYDROLOGIC UNIT 04040003, ON LEFT BANK NEAR UPSTREAM SIDE OF 70TH STREET BRIDGE IN WAUWATOSA, 800 FT (244 M) DOWNSTREAM FROM HONEY CREEK, AND AT MILE 6.2 (10.0 KM).

DRAINAGE AREA.--123 MI² (319 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--OCTOBER 1961 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER AND CREST-STAGE GAGE. DATUM OF GAGE IS 630.86 FT (192.286 M) ABOVE MEAN SEA LEVEL. PRIOR TO NOV. 1, 1974, NONRECORDING GAGE AT PRESENT SITE AND DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FROM DECEMBER 18 TO APRIL 10, WHICH ARE FAIR. LOW FLOW AFFECTED BY THREE SEWAGE TREATMENT PLANTS UPSTREAM.

AVERAGE DISCHARGE.--15 YEARS, 88.4 FT³/S (2.503 M³/S) 9.76 IN/YR (248 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 13,500 FT³/S (382 M³/S) APR. 21, 1973, GAGE HEIGHT, 13.92 FT (4.24 M) FROM RATING CURVE EXTENDED ABOVE 6,000 FT³/S (170 M³/S) ON BASIS OF SLOPE-AREA MEASUREMENT OF PEAK FLOW; MINIMUM DAILY, 2.8 FT³/S (0.079 M³/S) JAN. 18, 1964.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 1,000 FT³/S (28.32 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)	DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)
MAR. 4	2200	*4.590	130.0	*9.09	2.770	APR. 24	1835	2.590	73.35	6.86	2.090
MAR. 26	2310	1.640	46.44	5.54	1.690	MAY 5	1945	1.720	48.71	5.67	1.730

MINIMUM DISCHARGE: 7.3 FT³/S (0.207 M³/S) SEPT. 5, 6, GAGE HEIGHT, 0.94 FT (0.27 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 18 TO FEB. 13.)

OCT. 1 TO JULY 25

JULY 26 TO SEPT. 30

1.1	12	3.0	360	0.9	6.3	1.8	81
1.3	24	4.0	780	1.0	9.2	2.2	160
1.6	52	5.0	1,320	1.1	14	2.5	235
2.0	108	7.0	2,700	1.5	44		
2.5	215						

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	21	195	19	14	215	203	128	60	23	27	46
2	21	100	118	18	14	338	164	112	56	21	16	14
3	20	84	85	17	15	439	138	102	50	20	15	11
4	19	48	70	16	18	1440	125	89	44	17	14	9.7
5	19	33	61	16	20	2540	108	349	39	14	31	8.8
6	17	29	64	16	24	894	97	339	35	16	20	7.6
7	19	42	56	15	27	606	86	172	35	19	12	9.7
8	20	43	52	15	30	470	76	127	37	19	10	10
9	21	61	58	14	40	337	71	104	34	18	11	142
10	21	163	49	14	82	276	63	116	33	16	12	23
11	21	68	50	14	78	241	121	115	32	14	12	13
12	20	45	56	14	76	536	78	84	30	14	13	10
13	21	41	110	14	76	706	71	74	30	15	13	9.8
14	37	34	215	13	96	412	66	69	202	15	70	11
15	94	31	160	13	220	323	84	254	55	17	16	10
16	26	29	117	13	450	242	85	288	39	18	16	10
17	19	29	72	13	350	165	100	170	33	16	11	10
18	16	29	37	12	480	149	69	118	100	13	11	9.8
19	17	29	28	12	298	151	67	95	39	14	12	40
20	17	63	20	12	192	165	79	80	26	16	12	38
21	20	50	19	12	170	165	171	69	24	15	10	14
22	19	35	18	13	132	140	140	60	23	15	9.0	11
23	20	30	16	13	123	120	105	55	23	29	9.0	11
24	20	29	15	13	166	101	837	51	24	21	11	9.4
25	18	31	13	13	265	105	1120	49	22	15	20	8.8
26	17	27	12	14	430	237	532	47	20	18	45	8.8
27	18	29	13	14	550	940	375	45	19	13	14	8.9
28	17	28	18	14	335	436	252	82	24	64	158	9.7
29	18	275	20	14	271	314	170	139	22	25	19	9.4
30	18	342	21	14	---	319	138	78	35	62	12	10
31	18	---	28	14	---	235	---	69	---	172	12	---
TOTAL	690	1898	1858	438	5042	13757	5791	3729	1245	784	673.0	543.6
MEAN	22.3	63.3	59.9	14.1	174	444	193	120	41.5	25.3	21.7	18.1
MAX	94	342	215	19	550	2540	1120	349	202	172	158	142
MIN	16	21	12	12	14	101	63	45	19	13	9.0	7.6
CFSM	.18	.51	.49	.11	1.41	3.61	1.57	.98	.34	.21	.18	.15
IN.	.21	.57	.56	.13	1.52	4.16	1.75	1.13	.38	.24	.20	.16
CAL YR 1975	TOTAL	39226.0	MEAN 107	MAX 1570	MIN	12	CFSM .87	IN 11.86				
WTR YR 1976	TOTAL	36448.6	MEAN 99.6	MAX 2540	MIN	7.6	CFSM .81	IN 11.02				

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087120 MEMONNEE RIVER AT WAUWATOSA, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--DECEMBER 1966 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: JANUARY 1975 TO CURRENT YEAR.

INSTRUMENTATION.--SEDIMENT PUMPING SAMPLER SINCE JANUARY 1, 1975.

REMARKS.--SEDIMENT RECORDS ARE GOOD. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 10 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 547 MG/L MAR. 27, 1975; MINIMUM DAILY MEAN, 4 MG/L ON SEVERAL DAYS. MAXIMUM OBSERVED, 981 MG/L JUNE 18, 1976; MINIMUM OBSERVED, 1 MG/L MAY 14, 1975.
 SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 2,500 TONS (2,270 TONNES) MAR. 22, 1975; MINIMUM DAILY, 0.22 TON (0.20 TONNE) SEPT. 28, 1975

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 448 MG/L NOV. 10; MINIMUM DAILY MEAN, 4 MG/L MAR. 10. MAXIMUM OBSERVED, 981 MG/L JUNE 18; MINIMUM OBSERVED, 3 MG/L MAR. 10, 11.
 SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 1,250 TONS (1,130 TONNES) MAR. 5; MINIMUM DAILY, 0.29 TON (0.26 TONNE) DEC. 26, SEPT. 6.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 6, 1975	1055	14.0	15.7	1020	Mar. 25, 1976	1230	9.0	90.9	1450
Oct. 29, 1975	1145	10.0	16.4	1300	May 27, 1976	1110	16.5	42.0	1200
Nov. 18, 1975	1515	10.5	30.2	280	July 15, 1976	1210	24.5	16.7	1300
Dec. 29, 1975	1225	0.0	33.9	1500	July 27, 1976	1420	26.0	14.0	1380
Mar. 16, 1976	1305	2.5	237	1200					

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT CHARGE (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
FEB , 1976							
18...	1230	490	--	--	50	59	72
MAR							
05...	1355	1954	179	944	48	56	61
12...	1610	670	344	622	59	64	73
12...	1820	790	257	548	69	79	92
APR							
24...	0450	151	48	20	--	--	--
24...	1250	474	182	233	--	--	--
24...	1850	2530	415	2840	--	--	--
24...	2250	1420	256	982	--	--	--
26...	0450	578	100	156	--	--	--
MAY							
06...	0140	542	231	338	--	--	--
JUL							
28...	1111	178	357	172	36	51	70
28...	1530	70	76	14	72	77	86
28...	1550	68	66	12	62	76	87
30...	2330	506	515	704	37	54	64
31...	2030	46	143	18	80	94	98

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
FEB , 1976						
18...	80	89	93	95	97	100
MAR						
05...	65	71	76	78	88	100
12...	84	89	91	94	100	--
12...	93	96	96	97	99	100
APR						
24...	--	--	100	--	--	--
24...	--	--	94	--	--	--
24...	--	--	84	--	--	--
24...	--	--	89	--	--	--
26...	--	--	90	--	--	--
MAY						
06...	--	--	98	--	--	--
JUL						
28...	81	95	98	100	--	--
28...	90	95	96	100	--	--
28...	92	96	97	100	--	--
30...	73	89	95	98	98	100
31...	99	100	--	--	--	--

04087120 MEMONOMEE RIVER AT WAUWATOSA, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)									
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20	1.2	24	1.5	55	35	11	.56	15	.57	15	8.3
2	15	.85	146	68	30	9.6	10	.49	15	.57	27	28
3	15	.81	65	16	20	4.6	14	.64	25	1.0	43	55
4	15	.77	26	3.5	10	1.6	15	.65	25	1.2	119	954
5	15	.77	20	1.8	10	1.7	15	.65	30	1.6	145	1250
6	14	.64	20	1.6	12	2.1	15	.65	30	1.9	25	62
7	15	.78	37	5.9	14	2.2	15	.61	30	2.2	14	23
8	16	.89	26	3.0	17	2.3	15	.61	35	9.8	11	14
9	17	.96	52	10	17	2.6	15	.57	45	13	8	7.6
10	19	1.1	448	223	16	2.1	15	.57	50	31	4	3.0
11	20	1.1	102	20	16	2.2	15	.57	90	34	5	3.0
12	21	1.2	40	4.9	16	2.4	15	.57	85	33	211	429
13	23	1.3	37	4.1	77	32	15	.57	61	29	273	639
14	47	7.4	35	3.2	145	93	15	.53	24	6.3	18	22
15	111	52	33	2.7	36	16	15	.53	76	50	11	9.5
16	21	1.5	31	2.4	20	6.3	15	.53	125	133	11	6.9
17	22	1.2	29	2.2	11	2.2	15	.53	66	50	10	4.5
18	24	1.1	27	2.1	10	1.0	15	.49	119	154	12	4.8
19	26	1.2	25	2.0	10	.76	15	.49	55	47	12	4.9
20	28	1.3	61	14	9	.48	15	.49	19	9.7	35	16
21	30	1.6	45	6.1	9	.46	15	.49	15	7.1	20	8.9
22	30	1.5	30	2.8	9	.44	15	.53	9	3.2	15	5.7
23	25	1.4	27	2.2	9	.39	15	.53	10	3.4	10	3.2
24	25	1.4	23	1.8	9	.36	15	.53	21	11	13	3.5
25	20	.97	30	2.5	9	.32	15	.53	42	33	13	3.8
26	20	.92	27	2.0	9	.29	15	.57	27	26	49	135
27	20	.97	24	1.9	9	.32	15	.57	41	44	286	805
28	20	.92	22	1.7	9	.44	15	.57	21	20	52	63
29	20	.97	160	147	8	.43	15	.57	14	10	34	29
30	20	.97	129	123	9	.51	15	.57	---	---	64	58
31	21	1.0	---	---	10	.54	15	.57	---	---	29	18
MONTH	---	90.69	---	682.90	---	224.64	---	17.33	---	766.54	---	4677.60

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)									
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	20	11	13	4.4	23	3.8	40	2.5	40	3.1	60	19
2	18	7.8	10	3.1	20	3.1	30	1.7	18	.80	13	.50
3	17	6.3	11	3.0	18	2.5	20	1.1	16	.64	13	.38
4	15	5.1	12	3.0	17	2.1	20	.92	35	1.4	14	.36
5	17	4.9	167	545	23	2.4	15	.57	31	3.0	14	.30
6	19	5.1	179	200	34	3.2	31	1.5	21	1.2	14	.29
7	19	4.3	25	12	40	3.8	30	1.6	15	.48	15	.38
8	17	3.4	12	4.2	60	6.0	29	1.5	15	.41	15	.42
9	15	2.9	9	2.6	50	4.6	28	1.4	15	.43	77	58
10	26	8.1	32	15	40	3.6	28	1.2	15	.51	14	.85
11	34	13	50	16	40	3.5	27	.99	15	.50	14	.49
12	9	1.9	21	4.7	37	3.0	26	1.0	15	.52	15	.40
13	12	2.2	11	2.1	26	2.2	26	1.1	15	.52	16	.42
14	8	1.4	11	2.0	193	155	25	1.0	97	45	16	.48
15	25	8.4	83	78	46	7.3	25	1.1	10	.43	17	.48
16	15	3.7	80	69	25	2.7	24	1.2	10	.44	18	.49
17	38	15	24	11	19	1.7	23	.99	11	.32	18	.51
18	14	2.5	21	6.7	120	91	23	.77	11	.34	19	.50
19	9	1.6	30	7.7	29	3.3	22	.84	12	.37	73	19
20	34	13	43	9.3	11	.82	22	.97	12	.37	33	4.2
21	103	61	48	8.9	11	.71	21	.87	13	.35	20	.74
22	50	19	52	8.3	12	.74	21	.84	13	.32	19	.57
23	23	6.4	53	7.9	13	.81	65	15	14	.33	19	.52
24	223	823	57	7.9	14	.94	27	1.7	14	.40	18	.45
25	165	569	67	8.7	16	.93	16	.68	37	12	18	.42
26	67	98	71	9.1	17	.91	14	.66	94	22	17	.40
27	39	40	75	9.1	19	.96	11	.40	17	.67	17	.40
28	30	21	95	24	21	1.4	81	32	153	136	16	.41
29	20	9.3	52	25	20	1.2	30	7.1	35	2.0	16	.40
30	16	5.8	25	5.5	53	5.7	76	71	19	.59	15	.41
31	---	---	28	5.2	---	---	273	188	16	.51	---	---
MONTH	---	1774.10	---	1118.40	---	319.92	---	337.20	---	235.95	---	112.17

TOTAL LOAD FOR YEAR: 10357.44 TONS.

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087125 SCHOONMAKER CREEK AT WAUWATOSA, WI

LOCATION.--LAT 43°03'02", LONG 87°59'23", IN NE 1/4 SE 1/4 SEC.22, T-7 N., R-21 E., MILWAUKEE COUNTY, HYDROLOGIC UNIT 04040003, ABOUT 100 FT (30.5 M) NORTHWEST OF INTERSECTION OF MARTHA WASHINGTON DRIVE AND MILWAUKEE AVENUE, IN WAUWATOSA, 0.51 MI (0.82 KM) ABOVE MOUTH AT THE MEMOMONEE RIVER.

DRAINAGE AREA.--1.96 MI² (5.08 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--DECEMBER 1974 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER AND CONCRETE CONTROL. ALTITUDE OF GAGE IS 670 FT (204 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS ARE FAIR.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 311 FT³/S (8,808 M³/S) JUNE 24, 1975, GAGE HEIGHT, 6.69 FT (2.04 M); MINIMUM, NO FLOW MANY DAYS DURING EACH YEAR.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 100 FT³/S (2,832 M³/S) JULY 30, GAGE HEIGHT, 4.67 FT (1.41 M); MINIMUM, NO FLOW MANY DAYS DURING THE YEAR.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 9 TO FEB. 22.)

2.4	0	2.8	3.8
2.5	.26	2.9	5.8
2.6	1.0	3.2	14
2.7	2.2	3.5	26

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0		0	.06	.11	.06	.02	0	0	.46
2	0	1.0	0		0	1.6	.10	.06	0	.01	0	0
3	0	.16	0		0	.34	.10	.05	.02	.01	0	0
4	0	0	0		0	11	.12	.05	.01	0	.33	0
5	0	0	0		0	1.2	.12	4.2	.01	0	.17	0
6	0	0	0		0	.25	.10	.09	.02	0	0	0
7	0	.29	0		0	.16	.08	.04	.02	.01	0	0
8	0	.01	.02		0	.14	.07	.04	.02	.03	0	0
9	0	.20	.10		0	.13	.08	.02	.01	.01	0	3.2
10	0	.96	0		.10	.10	.83	.53	.06	.01	0	.01
11	0	.01	0		.10	.08	.06	.03	.01	0	0	0
12	0	0	0		.50	1.6	.07	.03	0	0	0	0
13	0	0	.90		.90	.13	.08	.02	.10	0	0	0
14	.24	0	.42		0	.10	.06	.02	1.6	0	.52	0
15	.32	0	0		1.2	.09	.21	2.2	.05	0	0	0
16	0	0	0		1.8	.07	.04	.05	.08	0	0	0
17	0	0	0		.37	.11	.55	.02	.03	0	0	0
18	0	0	0		2.1	.09	.04	.02	1.8	0	0	0
19	0	0	0		.10	.10	.04	.01	.04	0	0	.55
20	0	.41	0		.23	.50	.58	.02	.01	.01	0	.01
21	0	.03	0		.60	.04	.84	.02	.01	0	0	.02
22	0	0	0		.10	.04	.14	.03	.03	0	0	0
23	0	0	0		.13	.09	.04	.02	.04	0	0	0
24	0	.01	0		.49	.07	8.4	.02	.06	0	0	0
25	0	.08	0		.58	.10	.89	.02	.14	0	.79	0
26	0	0	0		.26	3.4	.18	.01	0	0	.76	0
27	0	.05	0		.23	.21	.15	.01	.16	0	.03	0
28	0	0	0		.18	.13	.17	.09	.03	.53	1.8	0
29	0	2.4	0		.17	.15	.18	.28	.01	0	0	0
30	0	.55	0		---	.74	.32	.02	.03	1.3	0	0
31	0	---	0		---	.15	---	.01	---	0	0	---
TOTAL	.56	6.16	1.44	0	10.14	22.97	14.75	8.69	4.42	1.92	4.40	4.25
MEAN	.019	.21	.047	0	.35	.74	.49	.28	.15	.062	.14	.14
MAX	.32	2.4	.90	0	2.1	11	8.4	4.2	1.8	1.3	1.8	3.2
MIN	0	0	0	0	0	.04	.04	.01	0	0	0	0
CFSM	.009	.11	.02	0	.18	.38	.25	.14	.08	.03	.07	.07
IN.	.01	.12	.03	0	.19	.44	.28	.16	.08	.04	.08	.08
CAL YR 1975	TOTAL	94.81	MEAN .26	MAX 13	MIN 0	CFSM .13	IN 1.80					
WTR YR 1976	TOTAL	79.70	MEAN .22	MAX 11	MIN 0	CFSM .11	IN 1.51					

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04087125 SCHOONMAKER CREEK AT WAUWATOSA, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--JANUARY 1975 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: APRIL 1975 TO CURRENT YEAR.

INSTRUMENTATION.-- SEDIMENT PUMPING SAMPLER SINCE APRIL 1, 1975.

REMARKS.--SEDIMENT RECORDS ARE FAIR. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 10 PERCENT OF THE PERIOD OF FLOW ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 285 MG/L NOV. 29, 1975; MINIMUM DAILY MEAN, 0 MG/L ON DAYS OF NO FLOW. MAXIMUM OBSERVED, 2,360 MG/L APR. 30, 1975; MINIMUM OBSERVED, 0 MG/L ON DAYS OF NO FLOW.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 39 TONS (35 TONNES) JUNE 24, 1975; MINIMUM DAILY, 0 TON (0 TONNE) ON MANY DAYS.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 285 MG/L NOV. 29; MINIMUM DAILY MEAN, 0 MG/L ON MANY DAYS. MAXIMUM OBSERVED, 1,680 MG/L AUG. 28; MINIMUM OBSERVED, 0 MG/L ON DAYS OF NO FLOW.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 17 TONS (15.4 TONNES) FEB. 21; MINIMUM DAILY, 0 TON (0 TONNE) ON MANY DAYS.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE DISE- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS- PENDE SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
FEB , 1976							
12...	1300	19	551	28	80	85	94
MAR							
12...	1446	7.1	330	6.3	59	71	82
APR							
21...	1600	14	613	23	--	--	--
24...	0625	5.7	96	1.5	--	--	--
24...	1020	14	117	4.4	--	--	--
MAY							
10...	1630	13	954	33	--	--	--
JUL							
28...	0810	6.9	485	9.0	39	50	72
28...	0900	6.1	222	3.7	44	60	75
SEP							
09...	0235	84	833	189	26	34	44
09...	0250	80	376	81	35	42	52
09...	0305	33	183	16	48	54	64

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
FEB , 1976						
12...	96	97	98	99	100	--
MAR						
12...	93	98	100	--	--	--
APR						
21...	--	--	90	--	--	--
24...	--	--	94	--	--	--
24...	--	--	91	--	--	--
MAY						
10...	--	--	94	--	--	--
JUL						
28...	85	99	99	100	--	--
28...	88	97	100	--	--	--
SEP						
09...	58	76	86	92	98	100
09...	66	81	86	94	100	--
09...	76	87	92	100	--	--

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087125 SCHOONMAKER CREEK AT WAUWATOSA, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TDNS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	0	0	0	0	0	0	0	0	0	0	34	.01
2	0	0	204	1.9	0	0	0	0	0	0	85	.73
3	0	0	93	.10	30	0	0	0	0	0	74	.09
4	0	0	0	0	0	0	0	0	0	0	260	17
5	0	0	0	0	0	0	0	0	0	0	69	.50
6	0	0	0	0	0	0	0	0	0	0	39	.03
7	0	0	90	.49	0	0	0	0	0	0	33	.02
8	0	0	35	.01	12	.01	0	0	0	0	25	.01
9	0	0	67	.24	50	.01	0	0	0	0	20	.01
10	0	0	105	2.7	0	0	0	0	77	.02	15	0
11	0	0	13	0	0	0	0	0	61	.02	12	.01
12	0	0	0	0	0	0	0	0	64	.09	96	.93
13	0	0	0	0	90	.22	0	0	18	.04	11	0
14	88	.29	0	0	60	.07	0	0	0	0	12	0
15	51	.37	0	0	0	0	0	0	112	1.9	13	0
16	0	0	0	0	0	0	0	0	46	.82	14	0
17	0	0	0	0	0	0	0	0	67	.08	15	0
18	0	0	0	0	0	0	0	0	148	2.5	17	0
19	0	0	0	0	0	0	0	0	27	.01	18	.01
20	0	0	161	.52	0	0	0	0	33	.08	98	1.4
21	0	0	63	.01	0	0	0	0	123	17	10	0
22	0	0	0	0	0	0	0	0	96	.03	10	0
23	0	0	0	0	0	0	0	0	52	.04	10	0
24	0	0	48	.01	0	0	0	0	98	.30	10	0
25	0	0	159	.14	0	0	0	0	109	.40	10	0
26	0	0	0	0	0	0	0	0	81	.10	93	6.5
27	0	0	83	.02	0	0	0	0	21	.01	122	4.4
28	0	0	0	0	0	0	0	0	24	.01	10	0
29	0	0	285	4.9	0	0	0	0	26	.01	29	.02
30	0	0	70	.65	0	0	0	0	---	---	36	.25
31	0	0	---	---	0	0	0	0	---	---	25	.01
MONTH	---	.66	---	11.69	---	.31	0	0	---	23.46	---	31.93

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	19	.01	27	0	10	0	0	0	0	0	20	.13
2	18	.01	21	0	0	0	10	0	0	0	0	0
3	17	0	17	0	10	0	10	0	0	0	0	0
4	16	0	13	0	10	0	0	0	21	.03	0	0
5	15	0	106	10	10	0	0	0	53	.07	0	0
6	14	0	14	0	10	0	0	0	0	0	0	0
7	13	0	10	0	10	0	10	0	0	0	0	0
8	12	0	10	0	10	0	10	0	0	0	0	0
9	11	0	10	0	10	0	10	0	0	0	40	3.1
10	36	.55	48	.96	24	.01	18	0	0	0	10	0
11	20	0	10	0	10	0	0	0	0	0	0	0
12	20	0	10	0	0	0	0	0	0	0	0	0
13	20	0	10	0	45	.02	0	0	0	0	0	0
14	20	0	10	0	117	3.6	0	0	35	.44	0	0
15	38	.19	58	.72	10	0	0	0	0	0	0	0
16	10	0	10	0	11	0	0	0	0	0	0	0
17	95	.77	10	0	12	0	0	0	0	0	0	0
18	12	0	10	0	76	2.6	0	0	0	0	0	0
19	18	0	10	0	10	0	0	0	0	0	42	.33
20	51	.46	10	0	10	0	10	0	0	0	10	0
21	73	.83	10	0	10	0	0	0	0	0	19	0
22	66	.20	10	0	10	0	0	0	0	0	0	0
23	22	0	10	0	10	0	0	0	0	0	0	0
24	126	4.1	10	0	11	0	0	0	0	0	0	0
25	29	.10	10	0	36	.03	0	0	38	1.4	0	0
26	10	0	10	0	0	0	0	0	48	.15	0	0
27	10	0	10	0	23	.17	0	0	17	.01	0	0
28	10	0	68	.36	10	0	49	.49	77	4.1	0	0
29	10	0	27	.07	10	0	0	0	0	0	0	0
30	20	.06	10	0	10	0	17	1.4	0	0	0	0
31	---	---	10	0	---	---	0	0	0	0	---	---
MONTH	---	7.28	---	12.11	---	6.43	---	1.89	---	6.20	---	3.56

TOTAL LOAD FOR YEAR: 105.52 TONS.

04087130 HAWLEY ROAD STORM SEWER AT MILWAUKEE, WI

LOCATION.--LAT 43°02'34", LONG 87°58'59", IN NW 1/4 SEC.26, T.7 N., R.21 E., MILWAUKEE COUNTY, HYDROLOGIC UNIT 04040003, UNDER HAWLEY ROAD VIADUCT AT CHICAGO, MILWAUKEE, ST. PAUL, & PACIFIC RAILROAD, ABOUT 200 FT (61 M) NORTH OF MEMOMONEE RIVER, AT MILWAUKEE, AND 5.2 MI (8.4 KM) UPSTREAM FROM MOUTH OF MEMOMONEE RIVER.

DRAINAGE AREA.--1.04 MI² (4.77 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--MAY 1975 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER AND VELOCITY RECORDER WITH A GATE CONTROL. ALTITUDE OF GAGE IS 620 FT (189 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS ARE GOOD.

EXTREMES FOR CURRENT PERIOD.--MAY TO SEPTEMBER 1975: MAXIMUM DISCHARGE DURING PERIOD, ABOUT 145 FT³/S (4.106 M³/S) JUNE 4; MINIMUM, 0.01 FT³/S (0.0003 M³/S) MANY DAYS DURING THE PERIOD.

WATER YEAR 1976: MAXIMUM DISCHARGE, ABOUT 140 FT³/S (3.965 M³/S) MAY 5; MINIMUM, 0.01 FT³/S (0.0003 M³/S) MANY DAYS DURING THE YEAR.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								.02	.01	.01	.02	.02
2								.02	.01	.01	1.3	.01
3								.02	.02	.08	.02	.32
4								.01	1.5	.02	.02	.02
5								.12	.11	.02	.39	1.2
6								.02	.01	.05	.02	.02
7								.01	.01	.02	.02	.01
8								.01	.01	.02	.02	.02
9								.01	.01	.02	.02	.02
10								.01	.01	.02	.02	.02
11								.25	.01	.56	.02	.02
12								.02	.01	.01	.02	.02
13								.01	.18	.01	.02	.02
14								.13	1.3	.01	.02	.02
15								.02	1.4	.01	.02	.02
16								.01	.02	.01	1.5	.02
17								.01	1.7	.01	.02	.02
18								.02	.01	.01	.87	.02
19								.02	.01	.05	.01	.02
20								.02	.01	.01	1.6	.02
21								.02	.01	.01	.01	.02
22								.02	.46	.01	3.1	.02
23								.02	.14	1.4	.50	.02
24								.02	2.5	.03	.02	.02
25								.02	.12	.01	.58	.02
26								.02	.02	.02	.01	.02
27								.02	.02	.02	.02	.02
28								.02	.02	.02	.35	.02
29								.02	.02	.02	.96	.33
30								.97	.02	.02	.02	.01
31								.02	---	.02	.01	---
TOTAL								1.93	9.66	2.54	11.53	2.36
MEAN								.062	.32	.082	.37	.079
MAX								.97	2.5	1.4	3.1	1.2
MIN								.01	.01	.01	.01	.01
CFSM								.03	.17	.04	.20	.04
IN.								.04	.20	.05	.23	.05

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087130 HAWLEY ROAD STORM SEWER AT MILWAUKEE, WI--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	DCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.01	.02	.01	.01	.01	.01	.02	.02	.02	.01	.79
2	.01	1.5	.02	.02	.01	1.6	.01	.01	.02	.02	.01	.01
3	.01	.13	.01	.01	.01	.40	.01	.02	.02	.02	.01	.01
4	.01	.01	.01	.01	.01	10	.01	.02	.02	.02	.01	.01
5	.01	.01	.01	.01	.01	2.3	.01	4.7	.02	.02	1.8	.01
6	.01	.01	.01	.01	.01	.02	.01	.02	.02	.02	.02	.01
7	.01	.49	.01	.01	.01	.01	.01	.02	.02	.02	.02	.01
8	.01	.02	.01	.01	.01	.01	.01	.02	.02	.02	.02	.01
9	.02	.32	.01	.01	.02	.01	.01	.01	.02	.02	.02	.01
10	.02	1.2	.01	.01	.34	.01	.86	.53	.02	.02	.02	.01
11	.02	.01	.01	.01	.02	.01	.01	.02	.02	.02	.02	.01
12	.02	.01	.01	.01	.36	1.7	.01	.02	.02	.02	.02	.01
13	.02	.01	.06	.01	.02	.01	.01	.02	.14	.20	.02	.01
14	.38	.01	.44	.01	.02	.01	.01	.02	1.0	.22	.64	.01
15	.62	.01	.01	.01	.41	.01	.01	3.4	.02	.14	.01	.01
16	.02	.01	.01	.02	1.5	.01	.01	.02	.02	.02	.01	.01
17	.02	.01	.01	.01	.01	.01	.38	.02	.02	.02	.01	.01
18	.02	.01	.01	.01	1.4	.01	.01	.02	1.8	.02	.01	.01
19	.02	.01	.01	.01	.01	.01	.01	.02	.02	.02	.01	.95
20	.02	.59	.01	.01	.04	.24	.67	.02	.02	.02	.01	.01
21	.02	.01	.01	.01	.02	.02	.71	.02	.02	.02	.01	.01
22	.02	.01	.01	.01	.01	.01	.02	.02	.02	.02	.01	.01
23	.02	.01	.01	.01	.01	.01	.01	.02	.02	.02	.01	.01
24	.02	.01	.01	.01	.74	.01	7.2	.02	.02	.02	.01	.01
25	.02	.02	.01	.01	.45	.01	.66	.02	.02	.02	.50	.01
26	.02	.02	.01	.01	.01	1.9	.01	.02	.02	.02	.03	.01
27	.02	.02	.01	.01	.01	1.2	.01	.02	2.8	.02	.01	.01
28	.02	.02	.01	.01	.03	.01	.01	1.3	.02	.90	1.8	.01
29	.01	3.8	.01	.01	.23	.01	.01	.34	.02	.02	.01	.01
30	.01	.76	.01	.01	---	.60	.05	.02	.02	2.2	.01	.01
31	.01	---	.01	.01	---	.01	---	.02	---	.43	.01	---
TOTAL	1.47	9.06	.81	.33	5.74	20.18	10.77	10.77	6.26	4.59	5.11	2.02
MEAN	.047	.30	.026	.011	.20	.65	.36	.35	.21	.15	.16	.067
MAX	.62	3.8	.44	.02	1.5	10	7.2	4.7	2.8	2.2	1.8	.95
MIN	.01	.01	.01	.01	.01	.01	.01	.01	.02	.02	.01	.01
CFSM	.03	.16	.01	.005	.11	.35	.20	.19	.11	.08	.09	.04
IN.	.03	.18	.02	.007	.12	.41	.22	.22	.13	.09	.10	.04
WTR YR 1976	TOTAL	77.11	MEAN	.21	MAX	10	MIN	.01	CFSM	.11	IN	1.56

04087130 HAWLEY ROAD STORM SEWER AT MILWAUKEE, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--JANUARY 1975 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: MAY 1975 TO CURRENT YEAR.

INSTRUMENTATION.--SEDIMENT PUMPING SAMPLER SINCE MAY 1, 1975.

REMARKS.--SEDIMENT RECORDS ARE FAIR. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 10 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 104 MG/L APR. 24, 1976; MINIMUM DAILY MEAN, 1 MG/L JUNE 21, 1976. MAXIMUM OBSERVED, 2,060 MG/L MAR. 26, 1976; MINIMUM OBSERVED, 1 MG/L JUNE 21, 1976.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 7.1 TONS (6.4 TONNES) MAR. 4, 1976; MINIMUM DAILY, 0 TON (0 TONNE) ON MANY DAYS.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTAN- TANEDUS DIS- CHARGE (CFS)	SUS- PENDE D SEDI- MENT (MG/L)	SUS- PENDE D SEDI- MENT CHARGE (T/DAY)	SUS- PENDE D SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM
APR , 1976												
20...	2035	12	201	6.5	--	--	--	--	--	91	--	--
20...	2110	4.0	83	.90	--	--	--	--	--	96	--	--
20...	2230	10	71	1.9	--	--	--	--	--	94	--	--
JUL												
28...	0915	4.7	53	.67	46	58	74	90	95	97	100	--
AUG												
24...	0405	15	238	9.6	30	36	45	60	81	86	96	100

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), MAY TO SEPTEMBER 1975

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			10	0	10	0	10	0	10	0	10	0
2			10	0	10	0	10	0	21	.25	10	0
3			10	0	10	0	10	0	10	0	16	.86
4			10	0	25	1.6	51	0	10	0	10	0
5			12	.01	10	.01	21	0	20	.30	17	.16
6			10	0	10	0	11	0	10	0	10	0
7			10	0	10	0	10	0	10	0	10	0
8			10	0	10	0	10	0	10	0	10	0
9			11	0	10	0	10	0	10	0	10	0
10			10	0	10	0	10	0	10	0	10	0
11			14	.06	10	0	29	.34	10	0	10	0
12			10	0	10	0	37	0	10	0	10	0
13			10	0	12	.02	30	0	10	0	10	0
14			10	0	19	1.6	25	0	10	0	11	0
15			10	0	22	.41	21	0	10	0	11	0
16			10	0	13	0	17	0	23	.86	12	0
17			10	0	31	.71	14	0	16	0	12	0
18			10	0	23	0	12	0	18	.14	13	0
19			10	0	19	0	12	.01	10	0	13	0
20			10	0	16	0	10	0	25	.67	12	0
21			10	0	13	0	10	0	31	0	13	0
22			10	0	18	.21	10	0	20	.88	14	0
23			10	0	13	.04	20	.37	10	.02	16	0
24			10	0	58	2.4	18	0	10	0	16	0
25			10	0	16	.02	16	0	14	.14	17	0
26			10	0	10	0	15	0	9	0	18	0
27			10	0	10	0	14	0	9	0	18	0
28			10	0	10	0	14	0	15	.12	19	0
29			10	0	10	0	13	0	16	.17	39	.09
30			22	.34	10	0	12	0	10	0	55	0
31			10	0	---	---	11	0	10	0	---	---
MONTH			---	.41	---	7.02	---	.73	---	3.55	---	.31

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087130 HAWLEY ROAD STORM SEWER AT MILWAUKEE, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15	0	15	0	12	0	10	0	10	0	12	0
2	15	0	50	.60	14	0	10	0	10	0	52	.36
3	15	0	20	.10	16	0	10	0	10	0	11	0
4	15	0	15	0	15	0	10	0	10	0	99	7.1
5	15	0	15	0	15	0	10	0	10	0	47	.55
6	15	0	15	0	14	0	10	0	10	0	10	0
7	15	0	26	.28	13	0	10	0	10	0	10	0
8	15	0	10	0	13	0	10	0	10	0	10	0
9	15	0	24	.23	12	0	10	0	10	0	10	0
10	15	0	31	.95	12	0	10	0	35	.11	10	0
11	15	0	14	0	11	0	10	0	10	0	10	0
12	15	0	14	0	11	0	10	0	20	.04	65	.86
13	15	0	13	0	16	.01	10	0	10	0	10	0
14	24	.02	13	0	18	.15	10	0	10	0	10	0
15	25	.05	12	0	10	0	10	0	41	.26	10	0
16	15	0	12	0	10	0	10	0	54	.62	10	0
17	15	0	11	0	10	0	10	0	71	0	10	0
18	15	0	11	0	10	0	10	0	35	.49	10	0
19	15	0	10	0	10	0	10	0	24	0	10	0
20	15	0	17	.09	10	0	10	0	53	.01	22	.16
21	15	0	10	0	10	0	10	0	42	0	11	0
22	15	0	10	0	10	0	10	0	26	0	13	0
23	15	0	10	0	10	0	10	0	16	0	15	0
24	15	0	10	0	10	0	10	0	24	.11	14	0
25	15	0	10	0	10	0	10	0	32	.08	12	0
26	15	0	10	0	10	0	10	0	24	0	47	1.6
27	15	0	10	0	10	0	10	0	17	0	17	.23
28	15	0	10	0	10	0	10	0	14	0	10	0
29	15	0	83	2.0	10	0	10	0	21	.05	10	0
30	15	0	11	.03	10	0	10	0	---	---	18	.09
31	15	0	---	---	10	0	10	0	---	---	10	0
MDNTH	---	.07	---	4.48	---	.16	---	0	---	1.77	---	10.97

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	73	0	30	0	14	0	30	0	23	0	16	.17
2	59	0	23	0	12	0	27	0	25	0	11	0
3	48	0	18	0	11	0	24	0	28	0	11	0
4	39	0	14	0	10	0	22	0	31	0	12	0
5	31	0	36	3.5	9	0	19	0	30	.02	13	0
6	25	0	20	0	8	0	17	0	25	0	13	0
7	20	0	18	0	7	0	15	0	33	0	14	0
8	16	0	15	0	8	0	14	0	45	0	15	0
9	13	0	12	0	10	0	12	0	59	0	16	0
10	20	.28	28	.25	11	0	11	0	80	0	15	0
11	25	0	12	0	13	0	10	0	68	0	15	0
12	21	0	8	0	15	0	9	0	60	0	14	0
13	18	0	8	0	18	.01	13	.01	32	0	13	0
14	15	0	9	0	26	.54	19	.02	33	.16	13	0
15	13	0	27	.42	11	0	17	.02	24	0	12	0
16	11	0	10	0	10	0	15	0	22	0	12	0
17	25	.16	11	0	10	0	14	0	21	0	11	0
18	10	0	11	0	32	1.1	14	0	19	0	11	0
19	10	0	11	0	8	0	14	0	17	0	24	.23
20	22	.17	12	0	3	0	13	0	16	0	10	0
21	46	.32	12	0	1	0	13	0	15	0	10	0
22	17	0	12	0	2	0	13	0	13	0	10	0
23	13	0	13	0	3	0	12	0	12	0	10	0
24	104	3.4	13	0	5	0	12	0	11	0	10	0
25	44	.22	14	0	8	0	10	0	21	.36	10	0
26	13	0	14	0	14	0	12	0	17	0	10	0
27	17	0	14	0	29	.12	11	0	12	0	10	0
28	21	0	74	.72	45	0	21	.33	20	.52	10	0
29	28	0	32	.16	37	0	10	0	12	0	10	0
30	35	.01	17	0	33	0	26	1.2	11	0	10	0
31	---	---	15	0	---	---	22	.04	10	0	---	---
MONTH	---	4.56	---	5.05	---	1.77	---	1.62	---	1.08	---	.40

TOTAL LDAD FOR YEAR: 31.93 TONS.

04087140 MEMOMONEE RIVER AT FALK CORP. AT 32ND STREET AT MILWAUKEE, WI

LOCATION.--LAT 43°01'35", LONG 087°57'14", IN SW 1/4 NE 1/4 SEC.36, T.7N., R.21E., MILWAUKEE COUNTY, HYDROLOGIC UNIT 0404003, AT SOUTHWEST CORNER FALK CORPORATION PROPERTY AT 32ND STREET, MILWAUKEE, AND AT MILE 0.40 (0.64 KM).

DRAINAGE AREA.--134 MI² (347 KM²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--DECEMBER 1974 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: MARCH 1975 TO CURRENT YEAR.

INSTRUMENTATION.--SEDIMENT PUMPING SAMPLER SINCE MARCH 1, 1975.

REMARKS.--SEDIMENT RECORDS ARE FAIR. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 10 PERCENT OF THE YEAR ARE ESTIMATED. STREAM DISCHARGE WAS ESTIMATED FROM MEASUREMENTS AT THIS STATION AND GAGE HEIGHT RECORD FOR 04087120 MEMOMONEE RIVER AT WAUWATOSA.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 596 MG/L JUNE 16, 1975; MINIMUM DAILY MEAN, 1 MG/L SEPT. 26, 1976. MAXIMUM OBSERVED, 1,040 MG/L MAR. 12, 1976; MINIMUM OBSERVED, 1 MG/L ON SEVERAL DAYS. SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 2,500 TONS (2,270 TONNES) MAR. 22, 1975; MINIMUM DAILY, 0.03 TON (0.03 TONNE) SEPT. 26, 1976.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 400 MG/L NOV. 10; MINIMUM DAILY MEAN, 1 MG/L SEPT. 26. MAXIMUM OBSERVED, 1,040 MG/L MAR. 12; MINIMUM OBSERVED, 1 MG/L SEPT. 26. SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 1,370 TONS (1,240 TONNES) MAR. 5; MINIMUM DAILY, 0.03 TON (0.03 TONNE) SEPT. 26.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Feb. 11, 1976	1215	3.5	70.5	4400	June 17, 1976	1415	26.0	40.1	
Mar. 25, 1976	1105	9.0	108	1100	Sept. 8, 1976	1235	20.0	17.6	800

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
JUL , 1976	28...	0900	15	233	9.4	47	76	91	98	99

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP , 1976	08...	1140	13	1	1	4	18	40	52	62	74	91

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087140 MEMONEE RIVER AT FALK CORP. AT 32ND STREET AT MILWAUKEE, WI-- CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	27	18	1.3	27	32	2.4	230	51	36
2	26	18	1.3	84	92	44	140	45	17
3	25	16	1.1	117	140	46	100	40	11
4	24	16	1.0	68	54	11	80	35	7.6
5	24	14	.90	44	10	1.2	70	30	5.7
6	22	8	.48	38	10	.94	76	22	4.5
7	24	8	.52	42	16	2.8	70	16	3.0
8	27	10	.66	61	46	8.4	63	28	4.7
9	26	10	.70	70	30	7.2	68	27	5.0
10	27	12	.86	177	400	228	62	25	4.2
11	27	14	.96	89	36	8.6	59	22	3.6
12	26	14	1.0	55	30	4.4	65	24	4.3
13	26	16	1.2	52	24	3.4	100	40	13
14	34	28	4.6	44	20	2.4	238	82	57
15	119	138	68	39	16	1.7	197	14	7.5
16	32	40	3.4	37	12	1.3	148	13	5.0
17	26	38	2.6	36	10	1.0	95	17	4.2
18	20	36	1.9	37	10	.86	40	22	2.4
19	22	34	2.0	36	10	1.1	30	17	1.4
20	20	34	1.8	69	60	17	23	16	1.0
21	25	32	2.2	65	55	9.6	23	13	.81
22	25	30	2.0	47	18	2.4	23	13	.81
23	25	30	2.0	39	12	1.2	21	16	.90
24	26	28	2.0	37	10	1.1	19	19	.97
25	24	26	1.7	39	12	1.4	17	9	.41
26	22	26	1.5	35	10	.66	16	8	.32
27	22	24	1.5	36	10	.50	17	13	.60
28	22	24	1.4	35	10	.72	22	15	.89
29	23	22	1.4	210	140	128	25	7	.47
30	24	22	1.4	406	142	168	26	6	.42
31	23	20	1.3	---	---	---	25	7	.47
TOTAL	865	---	114.68	2171	---	707.28	2188	---	205.17

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	25	6	.40	18	12	.58	246	22	15
2	23	9	.56	18	13	.63	370	51	51
3	22	12	.71	20	15	.81	486	86	113
4	21	10	.57	23	17	1.1	1600	94	780
5	21	8	.45	26	20	1.4	3210	146	1370
6	21	11	.62	31	23	1.9	1030	40	110
7	20	20	1.1	35	26	2.5	690	23	42
8	20	20	1.1	39	30	3.2	533	21	30
9	16	20	.97	52	35	4.9	390	22	23
10	18	20	.97	106	40	11	311	18	15
11	18	20	.97	100	50	14	270	18	13
12	18	20	.97	98	136	36	615	258	496
13	18	50	2.4	98	114	30	810	202	582
14	17	20	.92	125	29	9.5	472	37	47
15	17	13	.60	286	211	162	369	21	21
16	17	12	.55	490	178	235	283	20	15
17	17	12	.55	390	141	148	190	16	9.2
18	16	12	.52	530	313	440	170	18	8.3
19	16	12	.52	367	91	90	174	20	9.4
20	16	12	.52	227	31	19	190	60	31
21	16	12	.52	202	39	21	190	20	10
22	17	12	.55	159	25	11	161	17	7.4
23	17	12	.55	144	31	12	138	25	9.3
24	17	12	.55	174	36	17	116	48	15
25	17	12	.55	290	54	42	120	13	4.2
26	18	12	.58	470	55	70	133	24	40
27	18	12	.58	600	50	80	1000	291	825
28	18	12	.58	382	28	29	523	53	75
29	18	12	.58	304	25	20	356	29	28
30	18	9	.44	---	---	---	341	44	41
31	18	12	.58	---	---	---	266	25	18
TOTAL	571	---	22.03	5804	---	1513.52	15753	---	4853.8

04087140 MEMONONEE RIVER AT FALK CORP. AT 32ND STREET AT MILWAUKEE, WI-- CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	231	20	12	158	9	3.8	72	20	4.0
2	198	16	8.6	133	6	2.1	69	17	3.1
3	170	14	6.6	126	8	2.7	62	15	2.6
4	153	12	5.0	108	5	1.5	55	11	1.7
5	129	13	4.6	123	59	149	49	10	1.3
6	117	14	4.4	584	169	600	45	9	1.1
7	104	10	3.0	213	42	26	43	8	.94
8	93	12	3.0	159	13	5.6	46	8	1.0
9	86	14	3.3	127	14	4.8	44	8	.93
10	81	13	2.8	111	12	3.6	42	11	1.3
11	164	39	17	160	60	30	41	10	1.1
12	96	10	2.7	104	16	4.5	40	13	1.4
13	87	8	1.9	91	18	4.4	38	13	1.4
14	80	8	1.7	83	10	2.2	214	171	136
15	85	18	4.1	197	55	53	77	59	12
16	112	26	7.8	356	122	130	50	69	9.3
17	117	33	10	210	27	15	43	63	7.3
18	86	14	3.2	149	22	9.4	100	123	81
19	81	13	2.7	117	18	5.5	62	131	30
20	76	16	3.3	99	32	8.5	35	44	4.2
21	169	100	53	86	40	11	30	52	4.2
22	192	57	30	74	25	5.0	30	61	4.9
23	129	15	5.2	66	40	8.5	28	70	5.4
24	538	202	700	63	30	5.0	30	58	4.6
25	1380	141	793	59	27	4.5	30	37	2.9
26	617	51	100	58	30	4.8	26	46	3.2
27	432	33	39	55	27	4.3	23	45	2.8
28	298	23	19	62	63	13	30	26	2.2
29	207	14	7.6	183	50	30	28	15	1.1
30	167	11	4.8	94	26	6.6	43	16	1.8
31	---	---	---	89	32	7.5	---	---	---
TOTAL	6475	---	1859.3	4297	---	1161.8	1525	---	334.77

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	28	10	.76	40	51	5.6	53	38	10
2	26	10	.70	21	37	2.1	19	18	.93
3	25	20	1.4	18	27	1.3	14	15	.54
4	21	20	1.1	18	20	.93	13	12	.42
5	17	25	1.1	31	16	1.5	11	10	.27
6	20	44	2.6	32	17	1.7	9.5	8	.20
7	24	37	2.5	16	8	.37	11	6	.19
8	25	38	2.5	14	8	.29	14	5	.19
9	23	32	2.0	13	7	.24	148	135	107
10	21	27	1.5	16	7	.30	35	11	1.3
11	18	20	.94	16	6	.25	17	5	.21
12	17	13	.58	16	6	.24	14	4	.16
13	19	8	.42	16	10	.42	12	9	.29
14	19	6	.29	77	98	32	14	6	.23
15	21	7	.38	25	13	1.1	14	5	.19
16	22	13	.88	20	5	.27	13	6	.21
17	22	22	1.4	14	6	.28	14	6	.22
18	17	19	.84	15	6	.24	13	8	.27
19	16	17	.77	15	7	.25	20	19	1.9
20	21	16	.95	14	9	.34	72	42	12
21	20	15	.82	14	11	.42	20	9	.48
22	19	14	.74	12	15	.49	14	7	.27
23	66	13	.70	11	19	.58	14	4	.13
24	41	26	5.3	13	20	.71	12	4	.13
25	20	11	.59	14	20	.72	12	2	.07
26	24	9	.59	62	41	11	11	1	.83
27	17	11	.48	19	12	.63	11	2	.06
28	66	207	72	167	140	163	12	2	.87
29	38	160	19	31	19	1.9	12	3	.10
30	19	18	.94	15	13	.51	12	5	.16
31	231	231	236	15	11	.46	---	---	---
TOTAL	938	---	360.77	820	---	230.14	660.5	---	138.22
YEAR	42067.5	---	11501.48						

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087204 OAK CRFEK AT SOUTH MILWAUKEE, WI

LOCATION.--LAT 42°55'30", LONG 87°52'12", IN NW 1/4 SEC.2, T.5 N., R.22 E., MILWAUKEE COUNTY, HYDROLOGIC UNIT 04040002, ON LEFT BANK 25 FT (8.0 M) DOWNSTREAM FROM 15TH AVENUE BRIDGE IN SOUTH MILWAUKEE AND 2.8 MI (4.5 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--25.0 MI² (64.8 KM²).

PERIOD OF RECORD.--OCTOBER 1963 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER AND CREST-STAGE GAGE. DATUM OF GAGE IS 631.40 FT (192.451 M) ABOVE MFAN SEA LEVEL.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR. LOW FLOWS MAY OCCASIONALLY BE AFFECTED BY ACTIVITY OF GRAVEL PIT UPSTREAM.

AVERAGE DISCHARGE.--13 YEARS, 21.8 FT³/S (0.617 M³/S) 11.84 IN/YR (301 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 935 FT³/S (26.5 M³/S) MAR. 4, 1976, GAGE HEIGHT, 7.90 FT (2.408 M); MAXIMUM GAGE HEIGHT, 8.23 FT (2.508 M) SEPT. 18, 1972; MINIMUM DISCHARGE, 0.40 FT³/S (0.011 M³/S) JAN. 3, 1964. GAGE HEIGHT, 2.33 FT (0.710 M).

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 250 FT³/S (7.08 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE		GAGE HEIGHT		DATE	TIME	DISCHARGE		GAGE HEIGHT	
		(FT ³ /S)	(M ³ /S)	(FT)	(M)			(FT ³ /S)	(M ³ /S)	(FT)	(M)
MAR. 3	0430	436	12.3	6.18	1.884	APR. 24	2315	695	19.7	7.10	2.164
MAR. 4	2300	*935	26.5	*7.90	2.408	MAY 6	0345	412	11.7	6.06	1.847
MAR. 27	0830	545	15.4	6.60	2.012	JUNE 18	1515	462	13.1	6.29	1.917

MINIMUM DISCHARGE, 0.58 FT³/S (0.016 M³/S) OCT. 6, 7, GAGE HEIGHT, 2.30 FT (0.701 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 26, 27, DEC. 2, 3, 8-11, DEC. 17 TO FEB. 12, FEB. 21-23.)

2.3	0.7	3.0	37
2.4	2.4	4.0	122
2.5	5.0	5.0	228
2.6	9.8	6.0	400
2.8	23	8.0	965

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	4.8	15	1.5	.96	24	29	26	7.7	2.2	9.9	5.8
2	1.5	5.8	4.5	1.5	.94	209	24	22	6.2	2.2	3.3	5.1
3	1.2	8.2	4.0	1.4	.94	313	20	19	5.5	1.8	2.6	2.4
4	.86	5.1	4.2	1.4	.92	376	23	17	5.1	1.5	2.2	1.5
5	.86	2.9	3.9	1.3	.90	855	19	61	4.5	1.5	2.2	1.0
6	.72	2.2	3.6	1.3	.88	291	16	228	3.9	1.3	2.0	1.0
7	1.0	2.0	3.1	1.3	.88	118	14	51	3.6	1.6	2.2	1.3
8	1.2	1.6	2.8	1.2	.90	68	14	30	3.3	1.6	1.8	1.3
9	1.0	2.2	3.0	1.2	.94	51	12	23	3.3	1.5	1.6	1.6
10	1.2	6.2	3.2	1.2	1.2	41	14	19	3.1	1.3	1.6	9.9
11	1.3	4.8	3.4	1.1	2.7	33	24	19	2.9	1.2	1.6	2.6
12	1.3	2.9	3.6	1.1	10	48	15	16	2.6	1.2	1.6	1.6
13	1.5	2.4	11	1.1	43	57	14	14	2.4	1.3	2.9	1.2
14	2.4	2.2	60	1.8	16	37	13	14	20	8.7	8.2	1.3
15	5.8	1.6	26	1.0	40	28	12	36	9.3	8.7	6.7	1.2
16	5.8	1.5	11	1.0	61	24	9.9	58	3.6	4.2	2.4	1.2
17	2.9	1.5	4.5	1.0	99	19	9.9	27	3.3	2.6	1.6	1.3
18	2.0	1.8	3.0	1.1	105	19	8.7	19	91	2.2	1.3	1.3
19	1.6	1.6	2.6	1.0	54	19	7.2	16	101	2.0	1.3	2.9
20	2.0	3.6	2.4	1.0	27	18	8.2	14	18	2.6	1.2	3.1
21	2.0	3.3	2.2	1.0	21	18	15	12	11	2.2	1.0	3.1
22	2.0	3.1	2.1	1.1	19	14	16	8.7	7.2	2.2	1.0	1.5
23	1.8	2.0	2.0	1.1	16	14	14	8.2	5.5	7.7	1.0	1.5
24	2.0	2.2	1.9	1.2	28	12	240	7.2	4.8	12	1.2	1.0
25	1.8	2.4	1.9	1.2	100	9.9	600	6.7	4.8	4.5	1.5	.86
26	1.5	1.8	1.8	1.1	107	25	268	6.2	3.3	2.4	2.4	1.0
27	1.3	1.7	1.7	1.1	51	412	97	5.8	3.6	2.2	2.0	1.0
28	1.6	1.6	1.6	1.1	33	124	57	9.3	4.2	14	16	1.0
29	2.0	19	1.6	1.0	26	62	38	21	3.6	7.2	9.9	1.0
30	1.5	73	1.6	1.0	---	56	29	12	2.9	16	2.4	1.2
31	1.5	---	1.6	1.0	---	36	---	11	---	46	1.6	---
TOTAL	57.54	175.2	194.8	35.6	870.16	3430.9	1680.9	837.1	351.2	167.6	98.2	76.16
MEAN	1.86	5.84	6.28	1.15	30.0	111	56.0	27.0	11.7	5.41	3.17	2.54
MAX	5.8	73	60	1.5	107	855	600	228	101	46	16	16
MIN	.72	1.5	1.6	1.0	.88	9.9	7.2	5.8	2.4	1.2	1.0	.86
CFSM	.07	.23	.25	.05	1.20	4.44	2.24	1.08	.47	.22	.13	.10
IN.	.09	.26	.29	.05	1.29	5.10	2.50	1.25	.52	.25	.15	.11
CAL YR 1975	TOTAL	6184.20	MEAN 16.9	MAX 364	MIN .72	CFSM .68	IN 9.20					
WTR YR 1976	TOTAL	7975.36	MEAN 21.8	MAX 855	MIN .72	CFSM .87	IN 11.87					

04087220 ROOT RIVER NEAR FRANKLIN, WI

LOCATION.--LAT 42°52'25", LONG 87°59'45", IN SE 1/4 SEC.22, T.5 N., R.21 E., MILWAUKEE COUNTY, HYDROLOGIC UNIT 0404002, ON RIGHT BANK 400 FT (120 M) UPSTREAM FROM STATE HIGHWAY 100, 2.1 MI (3.4 KM) UPSTREAM FROM ROOT RIVER CANAL, 2.4 MI (3.9 KM) SOUTHEAST OF FRANKLIN, 5.5 MI (8.8 KM) SOUTHEAST OF MALES CORNERS, AND ABOUT 24 MI (39 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--49.3 MI² (127.7 KM²).

PERIOD OF RECORD.--OCTOBER 1963 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 674.5 FT (205.6 M) ABOVE MEAN SEA LEVEL.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR. FLOW AFFECTED BY URBANIZATION IN THE DRAINAGE BASIN.

AVERAGE DISCHARGE.--13 YEARS, 45.5 FT³/S (1.289 M³/S), 12.54 IN/YR (319 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 3,700 FT³/S (105 M³/S) APR. 21, 1973. GAGE HEIGHT, 9.31 FT (2.838 M); MINIMUM, 0.39 FT³/S (0.011 M³/S) AUG. 10, 1971, GAGE HEIGHT, 1.45 FT (0.442 M).

EXTREMES OUTSIDE OF PERIOD OF RECORD.--FLOOD OF MAR. 30, 1960, REACHED A STAGE OF 9.57 FT (2.917 M); DISCHARGE, 5,130 FT³/S (145 M³/S), FROM RATING CURVE EXTENDED ABOVE 2,000 FT³/S (56.6 M³/S) ON BASIS OF CONTRACTED-OPENING MEASUREMENT OF PEAK FLOW.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 350 FT³/S (9.91 M³/S) AND MAXIMUM (#):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)	DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)
MAR. 5	--	*2,160 61.2	*40.58 2.615	APR. 25	0400	1,280 36.2	7.85 2.393
MAR. 27	1300	830 23.5	7.30 2.225	MAY 6	0900	760 21.5	7.20 2.195

A FROM FLOODMARKS

MINIMUM DISCHARGE, 2.4 FT³/S (0.068 M³/S) AUG. 20, 21, GAGE HEIGHT, 1.66 FT (0.506 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (SHIFTING-CONTROL METHOD USED OCT. 1-15, JULY 16 TO AUG. 27; STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 26-28, DEC. 9-11, DEC. 17 TO FEB. 23.)

1.6	1.0	4.0	143
1.7	3.0	5.0	219
1.8	5.5	6.0	342
1.9	9.0	7.0	650
2.1	21	8.0	1,420
2.5	51	9.0	2,840
3.0	82		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	6.2	39	5.0	5.2	57	76	50	23	6.0	14	9.6
2	4.0	7.6	20	5.0	5.2	223	58	45	22	5.6	7.0	9.6
3	4.0	20	19	4.8	5.0	386	48	41	21	4.7	6.0	5.5
4	4.0	11	12	4.8	5.0	420	44	36	16	4.2	5.2	5.0
5	3.5	9.2	10	4.8	5.0	1800	38	62	11	3.8	5.2	4.0
6	3.7	7.6	10	4.6	4.9	578	34	553	11	3.4	4.8	3.7
7	4.2	7.3	9.2	4.6	4.7	178	31	160	9.6	4.0	5.4	4.2
8	5.0	6.9	8.8	4.4	4.7	113	28	77	8.6	4.2	4.7	3.7
9	4.7	7.3	8.0	4.4	5.4	86	26	56	8.4	4.2	4.4	3.3
10	4.2	19	8.2	4.4	6.4	72	26	41	8.4	3.7	4.4	2.6
11	4.5	15	8.6	4.3	10	59	47	37	8.6	3.6	4.4	2.2
12	4.7	8.8	9.6	4.3	4.0	81	32	35	8.6	4.2	5.0	8.4
13	5.5	7.6	16	4.3	9.0	148	28	34	8.0	6.2	9.0	3.7
14	6.2	9.2	69	4.2	5.0	87	26	116	4.0	6.2	16	3.7
15	22	10	42	4.2	9.0	62	26	84	15	13	13	3.7
16	16	9.2	26	4.2	13.0	51	26	52	11	5.2	4.5	3.7
17	6.5	9.2	11	4.7	18.0	41	31	41	10	4.5	3.3	3.7
18	4.7	9.2	9.0	5.2	19.0	38	30	35	18.0	4.5	2.8	3.2
19	4.7	6.5	8.0	4.7	10.0	38	25	32	20.0	3.7	2.8	3.7
20	5.0	6.5	7.6	4.5	5.0	38	25	30	36	5.2	2.6	1.1
21	5.2	11	7.0	4.5	4.5	36	36	28	20	4.6	2.6	6.2
22	5.0	8.4	6.6	4.5	4.2	31	45	26	14	4.6	2.8	4.5
23	5.0	6.9	6.4	4.8	3.8	29	35	24	12	16	2.8	4.0
24	4.7	6.5	6.2	5.0	4.5	28	28.0	23	11	24	3.0	3.7
25	4.7	7.3	6.0	6.0	10.6	26	107.0	23	10	8.0	2.8	3.7
26	4.0	6.0	5.6	6.0	20.4	31	34.0	22	8.0	6.0	9.2	3.7
27	4.5	5.6	5.6	5.8	17.9	61.8	14.0	35	8.6	5.8	6.2	4.2
28	5.0	5.6	5.4	5.6	12.0	26.7	87	39	9.4	28	35	4.2
29	4.7	23	5.4	5.6	7.2	11.4	65	28	8.4	15	18	4.0
30	4.5	127	5.2	5.4	---	128	53	27	7.0	4.0	5.5	3.7
31	4.7	---	5.2	5.4	---	103	---	24	---	9.0	21.0	---
TOTAL	173.8	400.6	415.6	150.0	1832.5	5967	2856	1916	764.8	342.1	217.4	213.0
MEAN	5.61	13.4	13.4	4.84	63.2	192	95.2	61.8	25.5	11.0	7.01	7.10
MAX	22	127	69	6.0	204	1800	107.0	553	200	90	35	33
MIN	3.5	5.6	5.2	4.2	4.7	26	25	22	7.0	3.4	2.6	3.2
CFSM	.11	.27	.27	.10	1.28	3.89	1.93	1.25	.52	.22	.14	.14
IN.	.13	.30	.31	.11	1.38	4.50	2.15	1.45	.58	.26	.16	.16
CAL YR 1975 TOTAL	14315.6		MEAN 39.2	MAX 1100	MIN 2.8	CFSM .80	IN 10.80					
WTR YR 1976 TOTAL	15248.8		MEAN 41.7	MAX 1800	MIN 2.6	CFSM .85	IN 11.51					

NOTE.--NO GAGE-HEIGHT RECORD MAR. 4, 5, JUNE 0 TO JULY 12.

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087233 ROOT RIVER CANAL NEAR FRANKLIN, WI

LOCATION.--LAT 42°48'55", LONG 87°59'40", IN SE 1/4 SEC.10, T.4 N., R.21 E., RACINE COUNTY, HYDROLOGIC UNIT 04040002, ON RIGHT BANK 10 FT (3 M) DOWNSTREAM FROM HIGHWAY BRIDGE 3.5 MI (5.6 KM) UPSTREAM FROM MOUTH, 5.5 MI (8.8 KM) SOUTHEAST OF INTERSECTION U.S. 45 AND STATE 100 IN FRANKLIN, AND 8.7 MI (14 KM) SOUTHEAST OF MALES CORNERS.

DRAINAGE AREA.--57.2 MI² (148.1 KM²).

PERIOD OF RECORD.--OCTOBER 1963 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 670 FT (204 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORD GOOD MAR. 1 TO AUG. 15, FAIR OTHERWISE.

AVERAGE DISCHARGE.--13 YEARS, 45.4 FT³/S (1.291 M³/S) 10.78 IN/YR (274 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 1,440 FT³/S (40.8 M³/S) MAR. 4, 1974, GAGE HEIGHT, 9.88 FT (3.011 M); MINIMUM DAILY, 0.40 FT³/S (0.011 M³/S) DEC. 19, 1963, RESULT OF FREEZEUP.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 500 FT³/S (14.2 M³/S) AND MAXIMUM (H):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)	DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)
MAR. 5	0700	*1,200	34.0	APR. 25	2200	786	22.3
MAR. 27	1900	547	15.5				8.84
							2.694

MINIMUM DAILY DISCHARGE, 1.1 FT³/S (0.031 M³/S), OCT. 6.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 6-11, DEC. 17 TO JAN. 4, JAN. 6 TO FEB. 23.)

1.9	1.0	5.0	199
2.0	1.6	6.0	285
2.2	4.8	8.0	550
2.5	20	9.0	850
3.0	50	10.0	1,480
4.0	119		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	7.0	19	2.8	1.9	72	103	99	22	4.8	5.5	5.4
2	1.6	7.4	12	2.6	1.9	243	86	82	18	4.2	3.0	4.0
3	1.4	8.0	6.3	2.5	1.8	435	70	67	15	3.9	2.5	3.0
4	1.3	6.0	5.2	2.4	1.8	509	61	56	13	3.2	2.5	2.5
5	1.2	4.5	4.8	2.1	1.8	1190	53	60	12	2.6	2.5	2.2
6	1.1	3.5	4.0	2.2	1.7	1040	48	269	11	2.6	2.4	2.0
7	1.9	3.0	3.3	2.2	1.7	636	42	167	9.3	2.6	2.2	2.1
8	2.2	2.7	3.1	2.2	1.8	310	37	107	7.7	3.0	2.1	2.5
9	1.8	4.0	3.0	2.1	1.9	204	35	77	6.7	2.8	1.8	9.0
10	2.2	9.0	3.1	2.1	2.1	161	34	60	6.3	2.6	1.9	6.0
11	2.5	6.4	3.2	2.1	2.5	130	40	52	6.3	2.6	1.9	3.0
12	2.7	5.2	3.2	2.0	7.0	145	33	45	5.5	2.4	2.0	2.0
13	3.0	4.0	9.9	2.0	50	182	31	41	5.2	2.4	2.2	1.8
14	4.5	3.1	58	2.0	35	142	30	39	44	2.5	6.3	1.9
15	6.0	2.8	47	1.9	70	111	27	49	37	4.8	3.9	1.7
16	6.4	2.6	32	1.9	80	93	29	84	23	3.9	2.3	1.6
17	4.5	2.5	19	1.9	100	74	25	63	16	3.2	1.8	1.7
18	3.5	2.9	12	2.2	110	67	23	48	35	2.5	2.0	3.0
19	3.1	3.4	10	2.1	80	63	20	41	66	2.5	2.0	4.5
20	3.4	7.0	8.4	2.0	62	57	20	37	34	2.5	1.8	8.0
21	3.7	6.2	7.0	2.1	54	49	25	32	23	2.3	1.8	5.8
22	3.6	5.2	6.0	2.2	50	41	28	29	20	2.2	1.8	2.8
23	3.3	3.8	5.0	2.4	47	39	23	27	18	2.4	1.7	1.6
24	3.7	4.0	4.5	2.5	53	37	167	24	16	2.4	1.7	1.5
25	3.0	4.3	4.0	2.4	138	32	721	23	15	2.2	2.0	1.5
26	2.5	3.5	3.7	2.2	251	35	733	20	11	2.0	2.5	1.7
27	2.2	3.2	3.5	2.2	192	480	491	19	7.2	2.1	3.7	2.1
28	2.6	2.9	3.3	2.2	133	412	232	19	6.3	3.7	6.7	1.9
29	3.2	40	3.2	2.1	96	214	164	27	5.9	4.8	8.8	1.8
30	2.8	50	3.0	2.0	---	172	126	24	5.9	3.2	3.0	2.1
31	2.7	---	2.9	1.9	---	134	---	24	---	8.2	2.3	---
TOTAL	89.5	218.1	312.6	67.5	1628.9	7509	3557	1811	521.3	97.3	88.6	90.7
MEAN	2.89	7.27	10.1	2.18	56.2	242	119	58.4	17.4	3.14	2.86	3.02
MAX	6.4	50	58	2.8	251	1190	733	269	66	8.2	8.8	9.0
MIN	1.1	2.5	2.9	1.9	1.7	32	20	19	5.2	2.0	1.7	1.5
CFSM	.05	.13	.18	.04	.98	4.23	2.08	1.02	.30	.05	.05	.05
IN.	.06	.14	.20	.04	1.06	4.88	2.31	1.18	.34	.06	.06	.06
CAL YR 1975	TOTAL	11534.3	MEAN 31.6	MAX 426	MIN 1.1	CFSM .55	IN 7.50					
WTR YR 1976	TOTAL	15991.5	MEAN 43.7	MAX 1190	MIN 1.1	CFSM .76	IN 10.40					

04087240 ROOT RIVER AT RACINE, WI

LOCATION.--LAT 42°45'05", LONG 87°49'25", IN NE 1/4 SEC.6, T.3 N., R.23 E., RACINE COUNTY, HYDROLOGIC UNIT 04040002, ON LEFT BANK 30 FT (9 M) DOWNSTREAM FROM STATE HIGHWAY 38 BRIDGE IN RACINE, 350 FT (110 M) DOWNSTREAM FROM HORLICK DAM, AND 5.2 MI (8.4 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--187 MI² (484 KM²).

PERIOD OF RECORD.--AUGUST 1963 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 610 FT (187 M), FROM TOPOGRAPHIC MAP. PRIOR TO FEB. 5, 1964, NONRECORDING GAGE ON BRIDGE 30 FT (9 M) UPSTREAM.

REMARKS.--RECORDS POOR.

AVERAGE DISCHARGE.--13 YEARS, 153 FT³/S (4.333 M³/S), 11.11 IN/YR (282 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 4,500 FT³/S (127 M³/S) MAR. 5, 1974, GAGE HEIGHT, 8.54 FT (2.603 M); MINIMUM DAILY, 1.3 FT³/S (0.037 M³/S) OCT. 12, DEC. 31, 1963, JAN. 1, 2, 1964.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 500 FT³/S (14.2 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)	DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)
FEB. 27	1830	702	19.9	4.06	1.237	APR. 26	1230	2,360	66.8	6.12	1.865
MAR. 6	0430	*2,930	83.0	*6.73	2.051	MAY 7	2300	860	24.4	4.29	1.308
MAR. 29	0200	1,340	37.9	4.93	1.503						

MINIMUM DAILY DISCHARGE, 3.2 FT³/S (0.091 M³/S) OCT. 10; MINIMUM GAGE HEIGHT, 2.00 FT (0.610 M) SEPT. 27.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND), (STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 17 TO FEB. 25.)

2.0	2.0	3.1	194
2.1	6.0	3.5	370
2.2	12	4.0	663
2.5	47	5.0	1,390
2.8	104	7.0	3,200

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	8.4	180	15	8.0	371	451	360	94	21	200	10
2	4.4	9.0	120	14	7.6	463	360	292	90	20	50	12
3	6.6	14	70	13	7.4	968	288	244	84	18	25	14
4	6.1	26	35	13	7.4	1460	244	205	60	17	17	10
5	5.2	27	26	12	7.2	2510	220	198	50	15	14	9.0
6	3.6	20	22	12	7.0	2840	187	457	45	14	13	8.0
7	4.0	19	20	11	7.0	2350	164	722	43	16	12	6.6
8	4.8	17	18	11	6.8	1600	151	715	42	16	13	6.4
9	4.4	17	18	10	6.8	991	142	392	40	17	11	6.2
10	3.2	26	18	10	9.0	669	130	265	39	15	10	11
11	3.6	27	18	9.6	21	491	139	224	41	15	9.6	33
12	4.4	45	18	9.4	60	429	164	198	42	18	9.4	26
13	3.6	26	21	9.0	150	503	142	177	38	22	9.2	15
14	5.2	20	73	8.8	250	539	130	167	54	30	29	7.2
15	9.0	18	177	8.6	180	451	125	177	64	40	27	7.4
16	14	24	120	8.4	150	366	122	311	80	21	40	7.6
17	28	22	60	8.4	270	320	140	397	62	15	30	7.0
18	14	21	40	9.2	350	257	130	200	52	10	20	7.6
19	9.0	16	31	11	400	224	110	170	150	6.0	15	7.4
20	7.2	15	26	10	200	217	110	150	140	8.0	11	10
21	9.0	14	25	9.2	140	190	130	140	80	11	8.0	20
22	6.6	32	24	8.6	130	170	160	130	66	9.4	6.2	13
23	6.6	24	22	8.2	120	154	130	120	94	9.0	5.4	16
24	10	20	21	8.4	110	145	400	110	47	15	5.2	6.0
25	10	17	20	10	250	136	1100	100	42	60	5.0	5.6
26	6.6	20	19	10	533	133	2400	94	37	25	6.0	5.4
27	6.6	19	18	9.6	682	887	1500	120	33	10	7.4	5.0
28	6.6	18	17	9.4	663	1120	1200	130	29	9.2	12	6.8
29	5.7	17	16	9.4	515	1200	742	120	26	80	20	6.0
30	6.1	60	16	9.0	---	817	491	110	23	40	37	5.4
31	7.2	---	16	8.6	---	582	---	100	---	60	15	---
TOTAL	225.3	658.4	1325	313.8	5248.2	23553	11902	7295	1747	682.6	692.4	310.6
MEAN	7.27	21.9	42.7	10.1	181	760	397	235	58.2	22.0	22.3	10.4
MAX	28	60	180	15	682	2840	2400	722	150	80	200	33
MIN	3.2	8.4	16	8.2	6.8	133	110	94	23	6.0	5.0	5.0
CFSM	.04	.12	.23	.05	.97	4.06	2.12	1.26	.31	.12	.12	.06
IN.	.04	.13	.26	.06	1.64	4.69	2.37	1.45	.35	.14	.14	.06
CAL YR 1975	TOTAL	42464.7	MEAN 116	MAX 1480	MIN 3.2	CFSM .62	IN 8.45					
WTR YR 1976	TOTAL	53953.3	MEAN 147	MAX 2840	MIN 3.2	CFSM .79	IN 10.73					

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087257 PIKE RIVER NEAR RACINE, WI

LOCATION.--LAT 42°30'49", LONG 87°51'30", IN SE 1/4 NE 1/4 SEC.11, T.2 N., R.22 E., KENOSHA COUNTY, HYDROLOGIC UNIT 04040002, ON RIGHT BANK JUST DOWNSTREAM FROM UNNAMED TRIBUTARY, 1.7 MI (2.7 KM) DOWNSTREAM FROM PIKE CREEK, 6.6 MI (10.9 KM) SOUTHWEST OF RACINE POST OFFICE AND 9.0 MI (14.5 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--38.7 MI² (100 KM²).

PERIOD OF RECORD.--OCTOBER 1971 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 620 FT (189 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS AND PERIOD OF NO GAGE-HEIGHT RECORD, WHICH ARE FAIR. LOW FLOWS CONSIDERABLY AFFECTED BY EFFLUENT DISCHARGE IN UPPER PORTION OF BASIN, AND BY OCCASIONAL REGULATION OF SMALL RECREATION DAM 1.1 MI (1.8 KM) UPSTREAM.

AVERAGE DISCHARGE.--5 YEARS, 39.2 FT³/S (1.110 M³/S), 13.76 IN/YR (350 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 1,480 FT³/S (41.9 M³/S) MAR. 4, 1976, GAGE HEIGHT, 8.15 FT (2.484 M); MINIMUM DAILY, 0.35 FT³/S (0.010 M³/S) SEPT. 28, 1976.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 1,480 FT³/S (41.9 M³/S) MAR. 4, GAGE HEIGHT, 8.15 FT (2.484 M); MINIMUM DAILY, 0.35 FT³/S (0.010 M³/S) SEPT. 18.

REVISIONS.--THE MAXIMUM DISCHARGE FOR WATER YEAR 1975 HAS BEEN REVISED TO 862 FT³/S (24.4 M³/S) JUNE 17, 1975. GAGE HEIGHT, 6.82 FT (2.079 M); MINIMUM DAILY DISCHARGE REVISED TO 0.70 FT³/S (0.021 M³/S) NOV. 13, 1974. REVISED DAILY DISCHARGES, IN CUBIC FEET PER SECOND FOR WATER YEAR 1975 ARE GIVEN BELOW. THESE FIGURES SUPERCEDE THOSE PUBLISHED IN THE REPORT FOR 1975.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	33	5.6	6.2	8.0	24	46	106	6.2	12	3.9	9.6
2	9.4	40	6.6	5.1	7.0	18	41	61	5.8	12	17	8.6
3	13	38	7.0	4.9	6.4	15	34	53	3.8	9.4	19	7.6
4	16	38	6.6	4.7	6.2	13	40	41	18	8.6	14	6.6
5	14	39	6.6	4.4	6.0	14	40	37	18	7.8	15	14
6	13	42	7.0	4.7	5.8	18	45	38	12	18	17	8.2
7	11	41	9.8	4.7	5.6	24	69	27	11	17	12	5.4
8	7.8	41	13	12	5.4	17	105	27	5.8	7.4	7.0	3.5
9	2.1	43	7.4	11	5.2	13	98	26	5.8	8.6	5.0	3.8
10	10	46	7.0	6.9	5.0	11	76	24	8.6	8.6	4.5	4.7
11	14	44	6.6	8.8	4.8	10	76	22	8.6	8.2	4.2	4.5
12	16	7.8	6.6	4.4	4.5	9.6	64	19	9.0	9.0	4.0	4.3
13	17	.70	6.2	2.5	4.6	13	54	17	9.0	7.4	3.8	4.1
14	20	5.0	8.2	2.0	4.7	16	48	17	8.6	6.6	3.7	3.8
15	12	9.4	18	1.6	4.8	22	43	23	9.1	6.6	3.9	3.6
16	9.8	9.4	14	1.4	5.0	38	31	14	32	7.0	4.4	3.5
17	9.4	8.2	9.8	1.3	1.3	162	26	13	319	7.0	5.0	3.4
18	9.8	7.0	8.2	1.2	1.4	221	36	13	238	7.8	5.4	3.3
19	9.4	12	7.8	1.1	1.7	136	44	13	104	8.6	4.0	3.1
20	9.0	4.7	7.4	1.0	1.3	87	31	19	66	5.8	2.5	3.0
21	8.6	13	7.0	9.4	1.4	7.9	24	18	44	5.1	3.0	2.8
22	11	2.6	6.2	8.6	2.0	11.8	30	17	37	5.4	2.5	3.0
23	12	7.4	6.2	9.0	4.0	8.5	29	13	52	5.8	5.0	3.4
24	11	12	5.4	1.2	1.50	8.0	41	12	33	1.2	2.0	5.4
25	9.8	7.8	4.5	2.0	9.0	6.5	33	12	2.5	9.0	1.1	4.7
26	9.8	7.8	4.3	1.0	5.2	5.0	2.6	1.7	2.3	6.0	8.0	5.4
27	9.8	.98	4.5	8.4	4.2	4.4	2.5	1.5	2.2	5.0	7.0	5.1
28	1.6	4.4	4.7	7.6	3.0	4.3	1.51	7.8	1.3	4.5	8.0	5.8
29	2.8	1.8	5.1	4.5	---	6.1	1.11	9.0	1.2	4.4	1.5	5.4
30	2.6	6.2	5.4	1.7	---	5.3	8.1	8.2	1.3	4.3	1.4	4.5
31	2.5	---	6.6	1.1	---	4.4	---	7.4	---	4.1	1.1	---
TOTAL	396.3	589.38	229.3	537.7	584.0	1603.6	1598	746.4	1254.2	249.0	376.8	194.6
MEAN	12.8	19.6	7.40	17.3	20.9	51.7	53.3	24.1	41.8	8.03	12.2	6.49
MAX	28	46	18	88	150	221	151	106	319	18	50	45
MIN	2.1	.70	4.3	4.4	4.5	9.6	24	7.4	3.8	4.1	3.7	2.8
CFSM	.33	.51	.19	.45	.54	1.34	1.38	.62	1.08	.21	.32	.17
IN.	.38	.57	.22	.52	.56	1.54	1.54	.72	1.21	.24	.36	.19
CAL YR 1974 TOTAL	18464.88			MEAN 50.6	MAX 1010	MIN .70	CFSM 1.31	IN 17.75				
WTR YR 1975 TOTAL	8359.28			MEAN 22.9	MAX 319	MIN .70	CFSM .59	IN 8.04				

04087257 PIKE RIVER NEAR RACINE, WI--CONTINUED

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(SHIFTING-CONTROL METHOD USED AUG. 23 TO SEPT. 23; STAGE-DISCHARGE RELATION
AFFECTED BY ICE JAN. 24 TO FEB. 24.)

OCT. 1 TO MAY 5				MAY 6 TO SEPT. 30			
2.0	3.2	4.0	179	1.5	.12	2.0	6.6
2.1	9.6	5.0	350	1.6	.39	2.2	15
2.3	16	6.0	600	1.7	1.0	2.5	32
2.5	28	7.0	930	1.8	2.2	3.0	66
3.0	68			1.9	4.0	3.5	117

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	8.0	15	7.0	4.2	56	63	63	18	5.2	9.2	5.2
2	31	12	10	7.0	4.1	401	68	44	17	4.7	2.2	3.8
3	20	19	8.4	6.8	4.1	579	58	41	10	4.0	3.6	3.6
4	15	17	8.8	6.6	4.0	531	50	30	9.2	3.6	3.2	3.0
5	13	15	8.6	6.6	4.0	892	44	89	9.6	3.6	3.6	2.4
6	13	13	8.0	6.6	3.9	340	39	197	8.4	3.6	3.6	1.9
7	12	11	7.4	6.4	3.8	198	32	90	6.4	3.6	3.0	2.1
8	10	10	7.0	6.2	3.8	146	15	66	6.8	4.0	2.4	3.2
9	20	13	7.6	6.0	4.0	123	26	50	8.8	3.6	2.7	5.5
10	21	25	8.0	5.8	7.0	102	22	44	8.0	3.4	3.4	3.2
11	15	14	9.0	5.8	20	82	29	33	7.7	3.0	4.0	3.0
12	11	12	12	5.8	50	90	17	34	6.7	2.7	4.0	2.2
13	11	10	19	5.6	60	101	19	28	6.1	3.4	3.8	2.2
14	9.8	9.0	50	5.6	33	82	19	28	27	7.0	11	3.0
15	9.4	7.0	30	5.4	40	69	22	44	15	9.2	4.4	3.2
16	8.2	6.0	25	5.4	50	55	44	50	7.3	4.7	1.8	3.0
17	7.0	6.0	20	5.2	60	48	24	40	8.0	4.0	3.6	3.0
18	7.0	6.6	18	5.2	70	46	20	28	11	3.2	3.8	2.8
19	5.8	7.0	16	5.8	50	45	14	29	11	3.0	4.0	2.5
20	11	10	14	5.4	42	41	17	28	6.7	4.0	4.0	4.2
21	10	9.6	13	5.2	37	32	26	21	7.0	4.0	3.6	3.6
22	9.6	8.0	12	5.2	35	27	20	18	6.7	3.6	2.7	3.4
23	8.4	7.0	11	5.4	33	27	7.8	18	7.3	4.0	2.4	3.6
24	9.0	7.2	10	5.8	50	26	134	17	8.0	3.4	3.6	2.7
25	8.4	8.0	9.2	6.2	117	23	244	17	8.8	2.7	3.8	2.7
26	7.4	7.6	8.6	5.6	157	25	250	16	7.0	2.7	3.8	9.2
27	6.0	7.0	8.2	5.2	118	237	193	15	5.5	4.2	3.8	3.2
28	6.6	13	7.8	5.0	78	193	126	15	3.2	11	21	.35
29	7.6	30	7.6	4.8	60	138	103	29	4.4	4.0	2.2	1.7
30	6.6	60	7.4	4.5	---	135	75	18	5.5	3.8	3.0	4.0
31	6.2	---	7.2	4.2	---	101	---	22	---	26	3.8	---
TOTAL	422.0	388.0	403.8	177.5	1202.9	4991	1830.8	1262	276.9	152.9	135.0	97.45
MEAN	13.6	12.9	13.0	5.73	41.5	161	61.0	40.7	9.23	4.93	4.35	3.25
MAX	86	60	50	7.0	157	892	250	197	27	26	21	9.2
MIN	5.8	6.0	7.0	4.2	3.8	23	7.8	15	3.2	2.7	1.8	.35
CFSM	.35	.33	.34	.15	1.07	4.16	1.58	1.05	.24	.13	.11	.08
IN.	.41	.37	.39	.17	1.16	4.80	1.76	1.21	.27	.15	.13	.09
CAL YR 1975 TOTAL	8358.10		MEAN	22.9	MAX	319	MIN	2.8	CFSM	.59	IN	8.03
WTR YR 1976 TOTAL	11340.25		MEAN	31.0	MAX	892	MIN	.35	CFSM	.80	IN	10.90

ST. CROIX RIVER BASIN

05331756 ST. CROIX RIVER NEAR DAIRYLAND, WI

LOCATIONIDN.--LAT 46°11'32", LONG 92°04'16", IN NE 1/4 SE 1/4 SEC.23, T.43N., R.14W., DOUGLAS COUNTY, HYDROLOGIC UNIT 07030001, AT BRIDGE ON COUNTY TRUNK HIGHWAY T 4.3 MI (6.9 KM) SOUTHFAST OF DAIRYLAND.

DRAINAGE AREA.--NOT DETERMINED.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--APRIL 1975 TO SEPTEMBER 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	BICARBONATE (MG/L)
OCT , 1975										
21...	1640	218	115	8.1	10.0	--	--	82	61	56
APR , 1976										
04...	1530	1800	60	7.0	4.0	--	--	<1	86	20
JUL										
22...	1030	232	100	8.0	24.0	8.4	104	818	660	50

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)
OCT , 1975									
21...	0	46	.7	1.2	.00	.00	.00	.03	.23
APR , 1976									
04...	0	16	3.2	.5	.08	.01	.09	.00	.58
JUL									
22...	0	41	.8	.7	.02	.01	.03	.01	.39

DATE	TOTAL KJEL-DAML NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUSPENDED SEDIMENT % FINER THAN .062 MM
OCT , 1975									
21...	.26	.26	1.2	.04	.04	15	1	.59	--
APR , 1976									
04...	.58	.67	3.0	.03	.02	13	15	73	32
JUL									
22...	.40	.43	1.9	.03	.03	--	6	3.8	74

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

05331855 NAMEKAGON RIVER NEAR HAYWARD, WI

LOCATION.--LAT 46°03'06", LONG 91°25'53", IN NE 1/4 NE 1/4 SEC.12, T.41N., R.9W., SAWYER COUNTY, HYDROLOGIC UNIT 07030002, AT BRIDGE ON TOWN ROAD 3.7 MI (6.0 KM) NORTHEAST OF HAYWARD.

DRAINAGE AREA.--NOT DETERMINED.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--APRIL 1975 TO SEPTEMBER 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROHMS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA, MG) (MG/L)
OCT , 1975												
20...	1800	146	185	8.6	8.0	8	1	--	--	81	87	81
FEB , 1976												
04...	1430	176	170	7.5	.0	7	1	10.6	76	<1	87	68
01...	1015	446	100	7.2	3.5	--	--	12.0	94	B14	45	--
06...	0910	440	105	7.0	6.5	45	1	11.0	93	--	--	45
JUL												
20...	0900	179	160	7.9	21.0	2	1	8.1	94	110	640	69

DATE	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT , 1975												
20...	3	23	5.8	2.3	6	.1	.7	79	8	78	.4	5.3
FEB , 1976												
04...	0	18	5.6	2.1	6	.1	.7	87	0	71	4.4	3.9
APR												
01...	--	--	--	--	--	--	--	--	--	--	--	--
06...	5	12	3.6	1.7	8	.1	.6	48	0	39	7.7	5.9
JUL												
20...	1	19	5.3	2.1	6	.1	.6	83	0	68	1.7	9.0

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE PLUS NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)
OCT , 1975												
20...	1.8	.1	12	110	98	.15	43.4	.00	.00	.00	.00	.16
FEB , 1976												
04...	1.9	.0	15	97	90	.13	46.6	.25	.00	.25	.03	.19
APR												
01...	--	--	--	--	--	--	--	--	--	--	--	--
06...	2.0	.1	9.8	64	60	.09	76.0	.16	.01	.17	.02	.38
JUL												
20...	1.7	.1	13	93	92	.13	44.9	.02	.01	.03	.02	.31

DATE	TOTAL KjELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED VEO- PHOSPHORUS (P) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT CHARGE (T/DAY)	SUS. SED. STIEVE DIAM. % FINER THAN .062 MM
OCT , 1975											
20...	.16	.16	.71	.01	.02	60	10	3.4	2	.79	--
FEB , 1976											
04...	.22	.47	2.1	.03	.02	120	10	3.3	11	5.3	--
APR											
01...	--	--	--	--	--	--	--	--	9	11	45
06...	.40	.57	2.5	--	.18	140	10	12	--	--	--
JUL											
20...	.33	.36	1.6	.04	.03	50	0	--	8	3.9	72

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

ST. CROIX RIVER BASIN

05331855 NAMEKAGON RIVER NEAR HAYWARD, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)
OCT , 1975									
20...	1800	146	1	1	<10	0	2	180	60
JUL , 1976									
20...	0900	179	1	1	0	1	0	340	50

DATE	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	CYANIDE (CN) (MG/L)
OCT , 1975								
20...	8	10	10	<.5	0	0	20	.00
JUL , 1976								
20...	3	40	0	<.5	1	0	10	.00

05332000 NAMEKAGON RIVER AT TREGO, WI

LOCATION.--LAT 45°54'20", LONG 91°49'05", IN NE 1/4 SW 1/4 SEC.35, T.40N., R.12W., WASHBURN COUNTY, HYDROLOGIC UNIT 07030002, AT CHICAGO AND NORTHWESTERN RAILROAD BRIDGE AT TREGO.

DRAINAGE AREA.--NOT DETERMINED.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA, MG)
OCT , 1975												
20...	1515	396	170	7.3	11.5	15	1	--	--	82	87	85
FEB , 1976												
05...	1030	400	--	7.6	.0	8	1	8.9	64	82	89	70
APR												
01...	1315	1500	95	7.1	2.0	55	2	13.1	99	87	260	40
JUL												
19...	1600	299	160	8.1	24.5	4	1	8.3	102	83	48	79

DATE	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)	DISSOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT , 1975												
20...	4	23	6.7	2.9	7	.1	.9	99	0	81	7.9	4.6
FEB , 1976												
05...	0	18	6.0	2.7	8	.1	.7	94	0	77	3.8	3.7
APR												
01...	4	11	3.1	1.5	7	.1	.6	44	0	36	5.6	5.2
JUL												
19...	3	21	6.4	2.5	6	.1	.5	92	0	75	1.2	3.3

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 100 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)
OCT , 1975												
20...	2.4	.2	13	107	103	.15	114	.00	.00	.00	.00	.22
FEB , 1976												
05...	2.5	.1	17	108	97	.15	111	.35	.00	.35	.06	.15
APR												
01...	1.5	.1	10	74	55	.10	300	.29	.01	.30	.02	.56
JUL												
19...	.2	.1	13	103	92	.14	83.2	--	--	--	--	--

DATE	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT CHARGE (T/DAY)	SUSPENDED SEDIMENT % FINER THAN .062 MM
OCT , 1975											
20...	.22	.22	.97	.02	.01	40	20	--	1	1.1	--
FEB , 1976											
05...	.21	.56	2.5	.05	.04	140	50	3.5	1	1.1	--
APR											
01...	.58	.88	3.9	.05	.02	210	30	10	--	--	--
JUL											
19...	--	--	--	.04	.03	10	0	--	7	5.7	58

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

ST. CROIX RIVER BASIN

05332000 NAMEKAGON RIVER AT TREGO, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)
OCT , 1975									
20...	1515	396	1	0	<10	0	2	340	40
JUL , 1976									
19...	1600	299	2	0	10	1	0	120	10

DATE	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	CYANIDE (CN) (MG/L)
OCT , 1975								
20...	0	30	20	<.5	0	0	20	.00
JUL , 1976								
19...	4	40	0	.5	0	0	10	--

05333500 ST. CROIX RIVER NEAR DANBURY, WI

LOCATION.--LAT 46°04'28", LONG 92°14'50", IN SW 1/4 SEC.33, T.42 N., R.15 W., BURNETT COUNTY, HYDROLOGIC UNIT 07030001, ON LEFT BANK AT DOWNSTREAM SIDE OF BRIDGE ON STATE HIGHWAY 35, 3.5 MI (5.6 KM) DOWNSTREAM FROM NAMEKAGON RIVER, 10 MI (16 KM) NORTHEAST OF DANBURY, AND AT MILE 129.2 (207.9 M).

DRAINAGE AREA.--1,588 MI² (4,113 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--MARCH 1914 TO CURRENT YEAR. PRIOR TO OCTOBER 1933, PUBLISHED AS "AT SWISS".

REVISED RECORDS.--WSP 1208: DRAINAGE AREA. WSP 1438: 1915(M), 1919-20, 1923-24(M), 1927(M), 1931(M), 1934, 1935-37(M). WSP 1628: 1918.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 882.21 FT (268.898 M) ABOVE MEAN SEA LEVEL. PRIOR TO APR. 23, 1937, NONRECORDING GAGE 40 FT (12 M) DOWNSTREAM AT SAME DATUM. APR. 23, 1937, TO JAN. 5, 1939, NONRECORDING GAGE AT PRESENT SITE AND DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR.

AVERAGE DISCHARGE.--62 YEARS, 1,301 FT³/S (36.84 M³/S), 11.13 IN/YR (283 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 10,200 FT³/S (289 M³/S) MAY 6, 1950, GAGE HEIGHT, 8.22 FT (2.505 M); MINIMUM OBSERVED, 393 FT³/S (11.1 M³/S) AUG. 6, 13, 1934, GAGE HEIGHT, -0.20 FT (-0.061 M), SITE THEN IN USE.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 6,360 FT³/S (180 M³/S) APR. 3, GAGE HEIGHT, 5.67 FT (1.728 M); MINIMUM, 530 FT³/S (15.0 M³/S) SEPT. 11, GAGE HEIGHT, 0.23 FT (0.070 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 29 TO MAR. 28.)

0.2	530	3.0	3,010
0.6	760	5.0	5,440
1.0	1,060	6.0	6,630

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	815	914	1400	1200	910	1100	5680	1600	906	790	646	592
2	826	877	1400	1200	910	1100	6020	1560	860	774	628	598
3	825	878	1400	1200	900	1000	6280	1530	849	807	652	596
4	827	874	1500	1100	890	970	6050	1460	826	749	658	570
5	812	876	1500	1100	900	960	5590	1430	805	743	652	565
6	811	868	1500	1100	900	950	5360	1450	799	723	664	570
7	822	824	1500	1100	890	980	5010	1350	782	776	658	568
8	810	835	1500	1100	890	1000	4540	1310	774	757	628	565
9	826	832	1500	1100	880	1100	4220	1270	732	734	634	570
10	827	1050	1500	1000	880	1100	3890	1220	851	733	670	562
11	829	1250	1500	1000	870	1100	3550	1180	814	696	706	549
12	816	1400	1500	1000	880	1100	3420	1170	826	662	724	558
13	802	1470	1400	1000	900	1100	3050	1100	803	683	700	564
14	820	1560	1400	1000	940	1100	2940	1090	790	688	706	585
15	812	1480	1400	1000	1000	1000	2780	1020	807	716	676	589
16	806	1430	1400	1000	1000	1000	2680	1030	803	698	646	597
17	815	1390	1400	1000	1000	1000	2390	1020	835	674	634	592
18	827	1330	1400	990	1000	1100	2270	1010	938	647	628	577
19	808	1370	1500	980	1000	1200	2320	953	944	659	648	586
20	788	1800	1500	980	990	1300	2360	897	892	947	628	606
21	787	1920	1580	980	980	1300	2170	879	854	970	616	579
22	792	1930	1400	980	990	1400	2050	910	850	850	592	569
23	825	1740	1400	970	1000	1500	2030	867	820	805	592	581
24	908	1690	1400	960	1100	1600	2120	844	809	796	592	582
25	1000	1570	1400	960	1100	1800	2180	862	825	747	586	571
26	996	1460	1300	960	1100	2000	2050	840	830	710	586	582
27	929	1320	1300	950	1100	2300	1820	850	887	707	592	591
28	915	1300	1300	940	1100	2600	1750	839	845	701	580	615
29	928	1300	1300	930	1100	3350	1700	866	847	712	588	609
30	932	1300	1200	920	---	4520	1650	859	828	711	575	814
31	921	---	1200	910	---	5320	---	898	---	693	580	---
TOTAL	26257	38838	43800	31610	28100	48950	99920	34164	25031	23058	19649	17646
MEAN	847	1295	1413	1020	969	1579	3331	1102	834	744	634	568
MAX	1000	1930	1500	1200	1100	5320	6280	1600	944	970	724	814
MIN	787	824	1200	910	870	950	1650	839	732	647	575	549
CFSM	.53	.82	.89	.64	.61	.99	2.10	.69	.53	.47	.40	.37
IN.	.62	.91	1.03	.74	.66	1.15	2.34	.80	.59	.54	.46	.41
CAL YR 1975	TOTAL	472416	MEAN	1294	MAX	4540	MIN	663	CFSM	.81	IN	11.07
WTR YR 1976	TOTAL	437023	MEAN	1194	MAX	6280	MIN	549	CFSM	.75	IN	10.24

ST. CROIX RIVER BASIN
 05333500 ST. CROIX RIVER NEAR DANBURY, WI--CONTINUED
 WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1954 TO CURRENT YEAR.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA, MG/L)
OCT , 1975												
23...	1500	950	140	8.0	9.0	10	1	--	--	810	47	66
FEB , 1976												
04...	1030	860	100	7.2	.0	13	2	10.6	76	<1	86	64
APR												
05...	1500	5500	60	7.4	5.5	70	2	10.7	89	82	16	27
JUL												
22...	1245	860	125	8.5	26.0	9	1	9.6	123	819	160	66

DATE	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT , 1975												
23...	0	18	5.2	2.6	8	.1	.7	81	0	66	1.3	3.3
FEB , 1976												
04...	0	17	5.3	2.3	7	.1	.6	80	0	66	8.1	3.8
APR												
05...	6	7.1	2.3	1.3	9	.1	.5	26	0	21	1.7	7.0
JUL												
22...	6	18	5.0	2.0	6	.1	.4	73	0	60	.4	2.6

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)
OCT , 1975												
23...	1.8	.3	9.7	95	82	.13	244	.00	.00	.00	.01	.26
FEB , 1976												
04...	1.8	.1	16	100	87	.14	232	.24	.00	.24	.05	.19
APR												
05...	1.4	.1	8.9	58	42	.08	661	.17	.01	.18	.02	.56
JUL												
22...	1.3	.1	11	85	76	.12	197	.01	.01	.02	.03	.30

DATE	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUSPENDED SED. SIEVE DIAM. % FINER THAN .062 MM
OCT , 1975											
23...	.27	.27	1.2	.03	.01	50	0	4.4	3	7.7	--
FEB , 1976											
04...	.24	.48	2.1	.03	.03	270	20	5.7	2	4.6	--
APR											
05...	.58	.76	3.4	.04	.03	230	20	10	50	742	11
JUL											
22...	.33	.35	1.6	.04	.02	40	10	39	11	26	100

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

05333500 ST. CROIX RIVER NEAR DANBURY, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)
OCT , 1975									
23...	1500	950	1	0	<10	0	1	270	50
JUL , 1976									
22...	1245	860	1	1	<10	1	0	300	40

DATE	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	CYANIDE (CN) (MG/L)
OCT , 1975								
23...	4	30	0	<.5	0	0	20	.00
JUL , 1976								
22...	5	40	10	<.5	0	0	20	.00

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 18, 1975	1500	4.5	1,340	135	May 25, 1976	1300	19.0	970	140
Jan. 16, 1976	1230	0.0	1,010	90	June 30, 1976	1400	19.0	939	150
Feb. 5, 1976	1230	0.0	923	100	Aug. 4, 1976	1330	21.0	686	160
Mar. 19, 1976	1200	0.0	2,980	-	Sept. 21, 1976	1330	14.0	551	140
Apr. 28, 1976	1500	5.0	1,740	100					

ST. CROIX RIVER BASIN

05334000 SHELL LAKE AT SHELL LAKE, WI

LOCATION.--LAT 45°44'46", LONG 91°55'00", IN NE 1/4 SEC.25, T.38 N., R.13 W., WASHBURN COUNTY, HYDROLOGIC UNIT 07030001, 500 FT (150 M) EAST OF PETERSON BOAT FACTORY IN THE VILLAGE OF SHELL LAKE.

DRAINAGE AREA.--34.0 MI² (88 KM²), APPROXIMATELY. AREA OF SHELL LAKE, 3,200 ACRES (13 KM²).

PERIOD OF RECORD.--AUGUST 1936 TO CURRENT YEAR (FRAGMENTARY).

GAGE.--NONRECORDING GAGE. DATUM OF GAGE IS 1,215.88 FT (370.600 M) ABOVE MEAN SEA LEVEL. MAY 3, 1952, TO APR. 21, 1961, 2.3 MI (3.7 KM) SOUTHEAST OF VILLAGE OF SHELL LAKE AT SAME DATUM.

REMARKS.--LAKE HAS NO SURFACE OUTLET. LAKE ICE COVERED FROM ABOUT NOV. 29 TO APR. 14.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM GAGE HEIGHT OBSERVED, 5.13 FT (1.564 M) JULY 17, 1954; MINIMUM OBSERVED, -0.92 FT (-0.280 M) NOV. 28, 1949.

EXTREMES FOR CURRENT YEAR.--MAXIMUM GAGE HEIGHT OBSERVED, 3.35 FT (1.021 M) APR. 28; MINIMUM OBSERVED, 1.28 FT (0.390 M) SEPT. 30.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	2.70	---	---
2	---	---	---	---	---	---	---	---	---	2.66	---	---
3	---	---	---	---	---	---	---	---	---	---	---	1.72
4	---	---	---	---	---	---	---	---	---	---	2.20	---
5	---	---	---	---	---	---	---	---	2.86	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	2.21	---	---	---	---	---	---	2.14	---
8	---	1.82	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	3.09	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	2.54	---	---
11	---	---	---	---	---	---	---	---	---	---	---	1.50
12	---	---	---	---	---	---	---	---	2.84	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	2.02	---
15	---	1.86	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	2.40	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	1.92	---	---	---	---	---	---	---	2.90	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	3.06	---	---	1.90	---
22	---	1.64	---	---	---	---	---	---	---	---	---	1.36
23	---	---	---	---	---	---	---	---	---	---	---	---
24	1.94	---	---	---	---	---	---	---	---	2.38	---	---
25	---	---	---	---	---	---	---	3.04	2.80	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	3.35	---	---	---	1.76	---
29	---	---	---	---	---	---	---	2.94	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	1.28
31	1.84	---	---	---	---	---	---	---	---	2.28	---	---

05335031 YELLOW RIVER AT DANBURY, WI

LOCATION.--LAT 46°00'44", LONG 92°21'27", IN NW 1/4 NW 1/4 SEC.27., T.41N., R.16W., BURNETT COUNTY, HYDROLOGIC UNIT 07030001, AT BRIDGE ON STATE HIGHWAY 35 0.7 MI (1.1 KM) NORTHEAST OF DANBURY.

DRAINAGE AREA.--NOT DETERMINED.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--APRIL 1975 TO SEPTEMBER 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	BICARBONATE (MG/L)
OCT , 1975										
23...	1130	266	170	8.1	10.0	--	--	85	34	103
APR , 1976										
05...	0915	689	145	7.4	3.5	11.0	87	83	44	92
JUL										
22...	0915	301	160	8.4	25.0	7.8	97	856	1000	92

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)
OCT , 1975									
23...	0	84	1.3	2.2	.03	.00	.03	.03	.50
APR , 1976									
05...	0	75	5.9	2.3	.28	.01	.29	.02	.38
JUL									
22...	0	75	.6	1.4	.02	.01	.03	.11	.82

DATE	TOTAL KjELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT CHARGE (T/DAY)	SUSPENDED SIEVE DIAM. % FINER THAN .062 MM
OCT , 1975									
23...	.53	.56	2.5	.39	.04	3.0	2	1.4	--
APR , 1976									
05...	.40	.69	3.1	.04	.03	13	4	7.4	83
JUL									
22...	.93	.96	4.3	.08	.03	--	5	4.1	--

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

ST. CROIX RIVER BASIN

05335500 CLAM RIVER NEAR WEBSTER, WI

LOCATION.--LAT 45°52'50", LONG 92°29'15", IN SW 1/4 NW 1/4 SEC.9, T.39N., R.15W., BURNETT COUNTY, HYDROLOGIC UNIT 07030001, AT ICE-HOUSE BRIDGE 2.5 MI (4.0 KM) DOWNSTREAM FROM BLACK BROOK, AND 6.0 MI (9.7 KM) WEST OF WEBSTER.

DRAINAGE AREA.--364 MI² (943 KM²), APPROXIMATELY.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--MAY 1975 TO SEPTEMBER 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS OIS-CHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	BICARBONATE (HCO3) (MG/L)
OCT , 1975										
23...	0930	186	220	7.8	11.0	--	--	87	811	136
APR , 1976										
05...	1200	1550	65	7.4	4.5	--	--	82	33	31
JUL										
22...	1510	128	170	9.1	25.5	9.4	119	83	140	110

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)
OCT , 1975									
23...	0	112	3.4	1.5	.05	.00	.05	.01	.26
APR , 1976									
05...	0	25	2.0	1.7	.27	.01	.28	.04	.71
JUL									
22...	0	90	.1	.5	.03	.01	.04	.27	1.0

DATE	TOTAL KJFL-OAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED VEOPHOSPHORUS (P) (MG/L)	TOTAL ORBANC CARBON (C) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUSPENDED SIEVE DIAM. % FINER THAN .062 MM
OCT , 1975									
23...	.27	.32	1.4	.03	.01	3.6	5	2.5	--
APR , 1976									
05...	.75	1.0	4.6	.06	.08	10	27	113	21
JUL									
22...	1.3	1.3	5.9	.08	.03	23	11	3.8	72

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

05337050 KETTLE RIVER NEAR CLOVERDALF, MN

LOCATION.--LAT 45°54'13", LONG 92°43'47", IN SW 1/4 SW 1/4 SEC.33, T.40N., R.19W., PINE COUNTY, HYDROLOGIC UNIT 07030003, 200 FT (61 M) WEST OF TOWN ROAD, 9.0 MI (14.5 KM) NORTHWEST OF GRANTSBURG, WISCONSIN.

DRAINAGE AREA.--NOT DETERMINED.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--MAY 1975 TO SEPTEMBER 1976.

WATER QUALITY DATA, MAY 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	BICARBONATE (MG/L)
OCT , 1975									
22...	1530	134	185	7.4	10.0	--	81	44	114
APR , 1976									
04...	1100	7230	70	7.0	4.0	--	80	38	19
JUL									
23...	1215	233	185	8.2	26.5	8.3	86	2100	94

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)
OCT , 1975									
22...	0	94	7.3	5.8	.00	.00	.00	.01	.25
APR , 1976									
04...	0	16	3.0	1.3	.19	.01	.20	.01	.82
JUL									
23...	0	77	.9	4.7	.00	.01	.01	.00	.30

DATE	TOTAL KjELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT , 1975								
22...	.26	.26	1.2	.02	.02	6.4	1	.36
APR , 1976								
04...	.83	1.0	4.6	.06	.06	18	--	--
JUL								
23...	.30	.31	1.4	.03	.03	13	3	1.9

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

ST. CROIX RIVER BASIN

05338500 SNAKE RIVER NEAR PINE CITY, MN

LOCATION.--LAT 45°50'30", LONG 92°56'00", IN SE 1/4 NW 1/4 SEC.26, T.39 N., R.21 W., PINE COUNTY, HYDROLOGIC UNIT 07030004, ON LEFT BANK, AT SITE OF FORMER POWERPLANT AND DAM, 0.5 MI (0.8 KM) DOWNSTREAM FROM CROSS LAKE, AND 1.5 MI (2.4 KM) NORTHEAST OF PINE CITY.

DRAINAGE AREA.--958 MI² (2,480 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--JUNE 1913 TO SEPTEMBER 1917, JULY 1951 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 919.00 FT (280.111 M) ABOVE MEAN SEA LEVEL. JUNE 25, 1913, TO SEPT. 30, 1917, NONRECORDING GAGE AT SITE 500 FT (152 M) DOWNSTREAM AT DIFFERENT DATUM. JULY 1 TO OCT. 28, 1951, NONRECORDING GAGE AT PRESENT SITE AND DATUM.

REMARKS.--RECORDS 6000 EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

AVERAGE DISCHARGE.--29 YEARS, 602 FT³/S (17.0 M³/S), 8.53 IN/YR (217 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 14,300 FT³/S (405 M³/S) JULY 27, 1972, GAGE HEIGHT, 10.38 FT (3.164 M); MINIMUM, 5.5 FT³/S (0.16 M³/S) OCT. 1, 1964, GAGE HEIGHT, 2.57 FT (0.783 M), RESULT OF DAM REHABILITATION 0.5 MI (0.8 KM) UPSTREAM.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--A DISCHARGE MEASUREMENT OF 12,500 FT³/S (354 M³/S) WAS MADE MAY 9, 1950.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 6,010 FT³/S (170 M³/S) APR. 2, GAGE HEIGHT, 7.45 FT (2.271 M); MINIMUM, 25 FT³/S (0.71 M³/S) AUG. 29, 30; MINIMUM GAGE HEIGHT, 2.65 FT (0.808 M) AUG. 30, SEPT. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	183	456	194	158	401	5750	403	211	328	40	28
2	140	175	437	195	157	404	5980	376	201	281	40	30
3	131	172	421	195	155	398	5960	345	180	264	41	42
4	122	156	407	195	154	392	5870	321	154	241	38	32
5	147	150	401	195	152	399	5590	304	142	213	44	27
6	115	150	384	194	150	371	5200	296	137	196	44	29
7	106	158	360	193	146	357	4660	276	128	207	42	32
8	98	155	350	192	141	343	4120	275	112	174	37	32
9	147	152	332	191	127	332	3540	256	96	153	34	36
10	130	210	322	190	120	311	3070	249	154	138	35	34
11	104	176	307	188	135	302	2670	209	124	125	38	32
12	107	262	295	182	132	319	2350	193	123	93	39	31
13	110	267	287	178	141	296	2100	199	191	88	34	34
14	132	274	291	176	141	276	1920	195	243	102	32	35
15	147	281	284	172	181	268	1710	191	328	111	32	33
16	102	274	267	171	178	265	1540	170	334	88	32	38
17	105	269	260	170	183	252	1430	160	328	75	30	40
18	110	264	245	168	200	241	1360	152	402	62	35	42
19	111	290	225	167	210	245	1220	146	428	58	40	44
20	125	370	211	166	218	270	1070	148	442	71	36	48
21	124	416	200	165	221	293	954	127	428	60	34	47
22	94	423	195	165	225	312	867	126	396	56	31	45
23	114	494	190	165	231	369	750	119	334	63	30	41
24	179	538	189	166	240	547	672	115	293	54	31	40
25	207	548	187	162	252	847	621	105	319	51	31	36
26	171	535	185	162	278	1400	582	106	275	53	32	40
27	185	507	185	162	304	2240	535	107	316	50	37	43
28	192	481	185	162	341	3120	500	191	352	50	34	46
29	182	470	188	162	376	4190	466	231	358	47	26	51
30	165	489	190	160	---	4980	439	241	352	46	26	46
31	182	---	190	156	---	5450	---	232	---	41	28	---
TOTAL	4232	9289	8626	5459	5647	30190	73516	6564	7881	3639	1083	1134
MEAN	137	310	278	176	195	974	2451	212	263	117	34.9	37.8
MAX	207	548	456	195	376	5450	5980	403	442	328	44	51
MIN	94	150	185	156	120	241	439	105	96	41	26	27
CFSM	.14	.32	.29	.18	.20	1.02	2.56	.22	.27	.12	.04	.04
IN.	.16	.36	.33	.21	.22	1.17	2.85	.25	.31	.14	.04	.04
CAL YR 1975 TOTAL	308805		MEAN 846	MAX 9150	MIN 76	CFSM .88	IN 11.99					
WTR YR 1976 TOTAL	157260		MEAN 430	MAX 5980	MIN 26	CFSM .45	IN 6.11					

05330500 SNAKE RIVER NEAR PINE CITY, MN--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1963, 1965, 1967-68, 1975 TO CURRENT YEAR.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	HARD- NESS (CA, MG) (MG/L)
OCT , 1975												
22...	1215	92	250	8.6	12.0	38	2	--	--	86	54	130
FEB , 1976												
03...	1430	120	340	7.2	1.0	38	3	11.0	81	8170	300	140
APR												
03...	0900	5910	90	7.1	4.5	90	5	10.8	87	835	851	40
JUL												
23...	1515	63	190	9.0	28.5	55	2	8.8	117	200	2400	100

DATE	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT , 1975												
22...	0	32	11	4.6	7	.2	1.7	140	10	131	.6	4.7
FEB , 1976												
03...	0	33	13	9.4	13	.4	1.9	184	0	151	19	6.0
APR												
03...	8	10	3.6	1.6	8	.1	1.6	39	0	32	5.0	6.7
JUL												
23...	13	27	9.0	3.5	7	.2	1.3	111	0	91	.2	5.4

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE PLUS NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)
OCT , 1975												
22...	4.2	.3	2.3	178	140	.24	44.2	.00	.01	.00	.01	.76
FEB , 1976												
03...	6.9	.2	17	194	179	.26	62.9	.39	.03	.42	.44	.66
APR												
03...	1.7	.1	8.1	77	53	.10	1230	.24	.01	.25	.07	.88
JUL												
23...	1.2	.1	7.3	140	110	.19	23.8	.06	.01	.07	.29	1.5

DATE	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	SUS- PENDEO SEDI- MENT (MG/L)	SUS- PENDEO SED- IMENT DIS- CHARGE (T/DAY)	SUS- SIEVE DIAM. % FINER THAN .062 MM
OCT , 1975											
22...	.77	.77	3.4	.07	.02	70	40	13	14	3.5	--
FEB , 1976											
03...	1.1	1.5	6.7	.26	.22	540	250	12	1	.32	--
APR											
03...	.95	1.2	5.3	.09	.11	310	50	15	21	335	75
JUL											
23...	1.8	1.9	8.3	.12	.05	120	70	48	9	1.5	--

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

ST. CROIX RIVER BASIN

0533BS00 SNAKE RIVER NEAR PINE CITY, MN--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CO) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	OIS- SOLVED IRON (FE) (UG/L)
OCT * 1975									
22...	1215	92	1	0	<10	0	1	300	70
JUL * 1976									
23...	1515	63	1	0	10	1	0	440	120

DATE	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	OIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	CYANIDE (CN) (MG/L)
OCT * 1975								
22...	2	80	40	<.5	0	0	30	.00
JUL * 1976								
23...	2	170	70	<.5	0	0	10	.00

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI
(NATIONAL STREAM-QUALITY ACCOUNTING NETWORK STATION)

LOCATION.--LAT 45°24'25", LONG 92°38'49", IN NW 1/4 SEC.30, T.34 N., R.18 W., POLK COUNTY, HYDROLOGIC UNIT 07030005, ON LEFT BANK, 1,800 FT (550 M) DOWNSTREAM FROM POWERPLANT OF NORTHERN STATES POWER CO., IN ST. CROIX FALLS, AND AT MILE 52.2 (84.0 KM).

DRAINAGE AREA.--5,930 MI² (15,360 KM²), APPROXIMATELY.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--JANUARY 1902 TO CURRENT YEAR. PRIOR TO JANUARY 1910, MONTHLY DISCHARGE ONLY, PUBLISHED IN WSP 1308. PRIOR TO OCTOBER 1939, PUBLISHED AS "NEAR ST CROIX FALLS."

REVISED RECORDS.--WSP 1115: 1929.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 689.94 FT (210.294 M) ABOVE MEAN SEA LEVEL. PRIOR TO JULY 1905, GAGE HEIGHTS AND DISCHARGE MEASUREMENTS WERE USED BY LOWETH AND WOLFF, CONSULTING ENGINEERS OF ST. PAUL, MINN., TO DETERMINE THE FLOW. JULY 1905 TO FEBRUARY 1940, RECORDS WERE COMPUTED FROM POWER GENERATION AT THE ST. CROIX FALLS POWERPLANT.

REMARKS.--RECORDS ARE GOOD. DIURNAL FLUCTUATION CAUSED BY ST. CROIX FALLS POWERPLANT 1,800 FT (550 M) UPSTREAM.

AVERAGE DISCHARGE.--74 YEARS, 4,192 FT³/S (118.7 M³/S), 9.60 IN/YR (244 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 54,900 FT³/S (1,550 M³/S) MAY 8, 1950, GAGE HEIGHT, 25.19 FT (7.678 M); MINIMUM DAILY, 75 FT³/S (2.12 M³/S) JULY 17, 1910.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 35,600 FT³/S (1,008 M³/S) APR. 3, GAGE HEIGHT, 25.19 FT (5.047 M); MINIMUM DAILY, 1,110 FT³/S (31.4 M³/S) SEPT. 7.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).

1.8	1,080	6.0	11,900
2.2	1,840	8.0	16,400
2.6	2,720	12.0	25,400
3.0	3,800	17.0	36,600
4.0	6,950		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2190	2270	4880	2960	2520	4470	33800	4940	2240	2640	1650	1300
2	2420	2380	4580	2830	2670	4040	35000	4660	2390	2800	1580	1210
3	2850	2600	4450	3050	2400	4560	35200	4530	2270	2480	1560	1220
4	2130	2440	4110	2990	2440	4000	34600	4400	2600	2080	1550	1330
5	2210	2460	4080	3060	2450	4460	33100	4300	1890	2020	1730	1210
6	2310	2620	4420	3190	2710	3840	30200	3870	2090	2130	1630	1190
7	2260	2450	4270	2950	2480	4040	26900	4170	2010	2230	1590	1110
8	2190	2390	4080	2900	2490	4160	24100	3780	2140	2210	1540	1180
9	2280	2540	4010	2710	2680	4040	21600	3480	2070	2190	1550	1240
10	2390	3610	4160	2870	2770	3900	19500	3420	2340	2300	1510	1230
11	2170	2460	4310	2720	2670	3890	17800	3430	2670	1890	1590	1210
12	2130	4240	4340	2660	2640	4050	15800	3380	1890	1850	1750	1210
13	2610	4240	4270	2440	2720	3970	13900	2900	2590	1590	1740	1230
14	2730	4340	4080	2500	2330	3470	13400	3290	2190	1780	1630	1240
15	2880	4060	3810	2920	2820	3420	10900	3030	3130	1820	1540	1280
16	2020	4300	3880	2660	2960	3430	10100	2470	2980	1990	1450	1220
17	2300	4050	3460	2280	2930	3770	10300	2990	3740	1620	1380	1280
18	1980	3960	3320	2630	3320	3710	9600	2370	5250	1500	1520	1310
19	2000	3530	2770	2700	3310	3950	9020	2810	4430	1480	1410	1370
20	2430	5480	3230	2290	3320	4150	8770	2630	4380	1610	1340	1420
21	2430	5410	3370	2780	3630	5070	8420	2730	3850	1940	1340	1230
22	2410	5580	3080	2460	3450	4960	7940	2280	3600	2390	1550	1230
23	2410	5380	3050	2930	3630	5420	7520	2220	2950	1000	1450	1420
24	2640	5220	3170	2420	3570	6020	7150	2080	2480	2080	1190	1420
25	2480	4530	3080	2440	4030	9460	7310	1950	2770	1790	1350	1230
26	2880	4400	3160	2920	4230	11300	7040	2420	3070	1890	1360	1230
27	3070	4440	3180	2370	4470	15200	6010	2200	3450	1700	1330	1510
28	2960	4290	3090	2550	4720	17500	5820	2320	3140	1680	1310	1410
29	2670	4520	3350	2750	4380	21400	5390	2700	3600	1630	1280	1480
30	2660	5030	2890	2630	---	28300	5290	2700	3050	2000	1200	1600
31	3390	---	2570	2710	---	31700	---	2750	---	1670	1140	---
TOTAL	76480	115220	114500	84270	90740	235650	481480	97200	87250	60780	45740	38750
MEAN	2467	3841	3694	2718	3129	7602	16050	3135	2908	1961	1475	1292
MAX	3390	5580	4880	3190	4720	31700	35200	4940	5250	2800	1750	1600
MIN	1980	2270	2570	2280	2330	3420	5290	1950	1890	1480	1140	1110
CFSM	.42	.65	.62	.46	.53	1.28	2.71	.53	.49	.33	.25	.22
IN.	.48	.72	.72	.53	.57	1.48	3.02	.61	.55	.38	.29	.24
CAL YR 1975 TOTAL	2011680		MEAN 5511	MAX 33800	MIN 1680	CFSM .93	IN 12.62					
WTR YR 1976 TOTAL	1528060		MEAN 4175	MAX 35200	MIN 1110	CFSM .70	IN 9.59					

NOTE.--NO GAGE-HEIGHT RECORD JAN. 10 TO FEB. 19, AUG. 13 TO SEPT. 30.

ST. CROIX RIVER BASIN

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI--CONTINUED
(NATIONAL STREAM-QUALITY ACCOUNTING NETWORK STATION)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1967-68, 1974 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: MARCH 1975 TO CURRENT YEAR.

WATER TEMPERATURES: MARCH 1975 TO CURRENT YEAR.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: MAXIMUM DAILY, 310 MICROMHOS MAR. 19, 1975; MINIMUM DAILY, 70 MICROMHOS NOV. 9, 1975.

WATER TEMPERATURES: MAXIMUM DAILY, 27.0°C JULY 11, 1976; MINIMUM DAILY, 0.0°C ON MANY DAYS DURING WINTER PERIOD.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: MAXIMUM DAILY, 265 MICROMHOS NOV. 3; MINIMUM DAILY, 70 MICROMHOS NOV. 9.

WATER TEMPERATURES: MAXIMUM DAILY, 27.0°C JULY 11; MINIMUM DAILY, 0.0°C ON MANY DAYS DURING WINTER PERIOD.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT , 1975										
14...	1415	1900	190	8.0	13.0	1	--	--	86	88
NOV										
10...	1300	6100	210	7.9	7.5	2	--	--	26	38
DEC										
16...	0945	5700	210	7.4	.0	2	--	--	88	811
JAN , 1976										
14...	1100	6950	160	7.7	.0	2	--	--	83	813
FEB										
19...	1200	4490	230	7.5	1.5	3	10.0	75	77	97
MAR										
09...	1200	5120	200	7.6	2.0	3	11.2	85	88	811
APR										
14...	0900	12600	100	7.4	11.0	2	--	--	813	100
MAY										
04...	1230	6130	145	7.7	10.0	2	--	--	84	84
JUN										
09...	1300	2420	180	8.2	25.5	2	--	--	810	820
JUL										
06...	1115	1860	165	8.3	24.5	3	--	--	30	480
AUG										
02...	1230	1560	180	7.1	24.5	2	8.1	101	816	330
SEP										
09...	1200	1330	190	--	20.0	4	8.8	101	827	110

DATE	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DISSOLVED PHOSPHATE (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
OCT , 1975										
14...	100	13	26	8.4	3.3	7	.1	1.1	105	0
NOV										
10...	93	0	24	8.0	3.0	6	.1	1.0	113	0
DEC										
16...	83	0	21	7.5	3.3	8	.2	.9	104	0
JAN , 1976										
14...	90	0	25	6.7	3.7	8	.2	1.1	117	0
FEB										
19...	95	5	25	7.9	3.4	7	.2	1.0	110	0
MAR										
09...	90	3	23	7.8	3.3	7	.2	1.1	106	0
APR										
14...	38	2	9.2	3.6	1.6	8	.1	1.0	44	0
MAY										
04...	70	5	17	6.7	2.3	7	.1	.9	79	0
JUN										
09...	94	8	25	7.6	3.1	7	.1	1.0	105	0
JUL										
06...	80	3	21	6.6	3.1	8	.2	.8	94	0
AUG										
02...	87	2	22	7.9	2.9	7	.1	.8	104	0
SEP										
09...	93	3	24	8.0	3.1	7	.1	.7	109	--

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	ALKA-LINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLD-RIDE (CL) (MG/L)	DIS-SOLVED FLUD-RIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
OCT , 1975										
14...	86	1.7	4.9	2.9	.2	12	122	111	.17	626
NOV										
10...	93	2.3	5.0	2.6	.2	10	115	110	.16	1890
DEC										
16...	85	6.6	7.6	3.4	.2	15	130	110	.18	2000
JAN , 1976										
14...	96	3.7	7.0	3.9	.2	16	134	122	.18	2520
FEB										
19...	90	5.6	7.0	3.3	.2	16	138	114	.19	1670
MAR										
09...	87	4.3	7.9	4.3	.2	16	134	116	.18	1850
APR										
14...	36	2.8	7.2	2.6	.1	8.0	79	55	.11	2690
MAY										
04...	65	2.5	5.2	2.1	.1	9.1	96	82	.13	1590
JUN										
09...	86	1.1	2.7	2.2	.1	8.3	113	102	.15	738
JUL										
06...	77	.8	4.6	2.6	.1	9.2	112	94	.15	562
AUG										
02...	85	13	3.2	2.6	.1	12	112	103	.15	472
SEP										
09...	89	--	6.4	5.1	.1	11	108	112	.15	388

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORBANIC CARBON (C) (MG/L)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS DRY WEIGHT G/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL B MG/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL A MG/SQ M
OCT , 1975										
14...	.10	.34	.44	1.9	.02	6.4	19.0	26.0	.70	22
NOV										
10...	.10	.32	.42	1.9	.04	--	--	--	--	--
DEC										
16...	.33	.54	.87	3.9	.04	--	--	--	--	--
JAN , 1976										
14...	.38	.46	.84	3.7	.05	9.0	.000	.000	.00	.00
FEB										
19...	.47	.40	.87	3.9	.07	--	--	--	--	--
MAR										
09...	.42	.52	.94	4.2	.07	--	--	--	--	--
APR										
14...	.19	.68	.87	3.9	.05	16	--	--	--	--
MAY										
04...	.15	.60	.75	3.3	.05	--	3.46	5.69	.51	4.7
JUN										
09...	.04	.43	.47	2.1	.04	--	--	--	--	--
JUL										
06...	.01	.75	.76	3.4	.06	10	--	--	--	--
AUG										
02...	.01	.55	.56	2.5	.05	--	--	--	--	--
SEP										
09...	.01	.43	.44	1.9	.04	--	--	--	--	--

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct. 14, 1975	1415	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	56	<1	
		<i>Dictyosphaerium</i>		0	
		<i>Micractinium</i>	450	4	
		<i>Scenedesmus</i>	220	2	
		<i>Schroederia</i>	56	<1	
		<i>Selenastrum</i>	56	<1	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Cocconeis</i>	56	<1	
		<i>Cyclotella</i>	680	6	
		<i>Diatoma</i>	170	1	
		<i>Gomphonema</i>	9,200	77	
		<i>Melosira</i>	56	<1	
		<i>Navicula</i>	620	5	
		<i>Nitzschia</i>	170	1	
		EUGLENOPHYTA			
		Cryptophyceae			
		<i>Cryptomonas</i>	170	1	
		TOTAL	12,000		
Nov. 10, 1975	1230	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	57	4	
		<i>Dictyosphaerium</i>		0	
		<i>Scenedesmus</i>	110	8	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	28	2	
		<i>Amphora</i>		0	
		<i>Asterionella</i>		0	
		<i>Cocconeis</i>	28	2	
		<i>Cyclotella</i>	540	39	
		<i>Cymbella</i>		0	
		<i>Diatoma</i>	57	4	
		<i>Epithemia</i>		0	
		<i>Fragilaria</i>	140	10	
		<i>Gomphonema</i>		0	
		<i>Melosira</i>	110	8	
		<i>Navicula</i>	170	12	
		<i>Nitzschia</i>	110	8	
		<i>Pinnularia</i>	28	2	
<i>Synedra</i>		0			
CYANOPHYTA					
Myxophyceae					
<i>Anabaena</i>		0			
<i>Anacystis</i>		0			
<i>Aphanizomenon</i>		0			
<i>Gomphosphaeria</i>		0			
<i>Oscillatoria</i>		0			
TOTAL	1,400				
Dec. 16, 1975	0945	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Westella</i>	230	12	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	33	2	
		<i>Asterionella</i>	17	1	
		<i>Cocconeis</i>		0	
		<i>Cyclotella</i>	370	18	
		<i>Cymbella</i>	17	1	
		<i>Fragilaria</i>	66	3	
		<i>Gomphonema</i>	17	1	
		<i>Navicula</i>	66	3	
		<i>Nitzschia</i>	17	1	
		CYANOPHYTA			
		Myxophyceae			
		<i>Aphanizomenon</i>	1,200	58	
TOTAL	2,000				
Jan. 14, 1976	1100	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Scenedesmus</i>		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	14	2	
		<i>Asterionella</i>		0	
		<i>Cocconeis</i>		0	
		<i>Cyclotella</i>	14	2	
		<i>Cymbella</i>		0	
		<i>Diatoma</i>		0	
		<i>Navicula</i>	42	7	
		<i>Nitzschia</i>	42	7	
		CYANOPHYTA			
		Myxophyceae			
		<i>Aphanizomenon</i>	510	82	
		TOTAL	620		

ST. CROIX RIVER BASIN

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method	
Feb. 19, 1976	1200	CHRYSOPHYTA			Grab sample	
		Bacillariophyceae				
		<i>Asterionella</i>	12	6		
		<i>Cocconeis</i>	24	12		
		<i>Cyclotella</i>		0		
		<i>Cymbella</i>		0		
		<i>Diatoma</i>	24	12		
		<i>Fragilaria</i>		0		
		<i>Gomphonema</i>		0		
		<i>Melosira</i>	12	6		
		<i>Navicula</i>	71	37		
		<i>Nitzschia</i>	35	19		
		<i>Pinnularia</i>		0		
		<i>Rhicosphenia</i>	12	6		
		<i>Tabellaria</i>		0		
		CYANOPHYTA				
		Myxophyceae				
		<i>Aphanizomenon</i>		0		
		<i>Oscillatoria</i>		0		
		EUGLENOPHYTA				
Euglenophyceae						
<i>Trachelomonas</i>		0				
TOTAL		190				
Mar. 9, 1976	1200	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Ankistrodesmus</i>		0		
		<i>Closterium</i>		0		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Asterionella</i>		0		
		<i>Cocconeis</i>		0		
		<i>Cyclotella</i>		3		
		<i>Cymbella</i>	55	3		
		<i>Diatoma</i>	55	3		
		<i>Fragilaria</i>		0		
		<i>Gomphonema</i>		0		
		<i>Melosira</i>		0		
		<i>Meridion</i>		0		
		<i>Navicula</i>	55	3		
		<i>Nitzschia</i>		0		
		<i>Stephanodiscus</i>		0		
		<i>Synedra</i>		0		
		CYANOPHYTA				
Myxophyceae						
<i>Oscillatoria</i>	1,700	88				
TOTAL		1,900				
Apr. 14, 1976	0900	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Chlamydomonas</i>	100	4		
		<i>Dictyosphaerium</i>		0		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Achnanthes</i>	51	2		
		<i>Asterionella</i>	200	8		
		<i>Cocconeis</i>		0		
		<i>Cyclotella</i>	1,100	44		
		<i>Cymbella</i>	51	2		
		<i>Diatoma</i>	51	2		
		<i>Gomphonema</i>	100	4		
		<i>Melosira</i>	360	14		
		<i>Navicula</i>	200	8		
		<i>Nitzschia</i>	250	10		
		<i>Synedra</i>	51	2		
		CYANOPHYTA				
		Myxophyceae				
		<i>Anabaena</i>		0		
EUGLENOPHYTA						
Euglenophyceae						
<i>Trachelomonas</i>		0				
TOTAL		2,500				

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method			
May 4, 1976	1230	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		Ankistrodesmus		0				
		Dictyosphaerium		0				
		Kirchneriella		0				
		Pediastrum		0				
		Scenedesmus	120	2				
		CHRYSOPHYTA						
		Bacillariophyceae						
		Achnanthes		0				
		Asterionella		0				
		Coccooneis	59	1				
		Cyclotella	4,100	69				
		Cymbella		0				
		Diatoms		0				
		Fragilaria		0				
		Gomphonema		0				
		Melosira	650	11				
		Navicula		0				
		Nitzschia	710	12				
		Rhoicosphenia		0				
		Synedra		0				
		CYANOPHYTA						
		Myxophyceae						
		Anacystis		0				
		Aphanizomenon	360	6				
		EUGLENOPHYTA						
Euglenophyceae								
Euglena		0						
TOTAL	6,000							
June 9, 1976	1300	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		Ankistrodesmus	830	5				
		Carteria		0				
		Dictyosphaerium	1,700	10				
		Elakatothrix	210	1				
		Gloeactinium	210	1				
		Kirchneriella		0				
		Micractinium	470	3				
		Oocystis	160	1				
		Pandorina	830	5				
		Pediastrum	410	3				
		Scenedesmus	1,100	7				
		CHRYSOPHYTA						
		Bacillariophyceae						
		Asterionella	160	1				
		Cyclotella	470	3				
		Cymbella	100	1				
		Melosira	470	3				
		Navicula		0				
		Nitzschia	1,300	8				
		Stephanodiscus	100	1				
		CYANOPHYTA						
		Myxophyceae						
		Agmenellum	2,100	13				
		Anacystis	1,200	8				
		Gomphosphaeria	3,300	20				
		Oscillatoria	930	6				
		EUGLENOPHYTA						
		Euglenophyceae						
		Trachelomonas		0				
		TOTAL	16,000					
		July 6, 1976	1115	CHLOROPHYTA				Grab sample
				Chlorophyceae				
				Actinastrum		840	2	
				Coelastrum		1,700	3	
				Dictyosphaerium		840	2	
Micractinium				0				
Scenedesmus	420			1				
Selenastrum	420			1				
Westella	420			1				
CHRYSOPHYTA								
Bacillariophyceae								
Achnanthes				0				
Cyclotella	7,600			16				
Cymbella				0				
Melosira	520			1				
Navicula				0				
Nitzschia	1,400			3				
CYANOPHYTA								
Myxophyceae								
Anabaena	17,000			34				
Anacystis	2,600			5				
Gomphosphaeria	10,000			21				
Oscillatoria	3,700			7				
EUGLENOPHYTA								
Cryptophyceae								
Chroomonas	840			2				
Cryptomonas				0				
TOTAL	49,000							

ST. CROIX RIVER BASIN

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method	
Aug. 2, 1976	1230	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Ankistrodesmus</i>	1,800	6		
		<i>Dictyosphaerium</i>	3,300	10		
		<i>Kirchneriella</i>	620	2		
		<i>Micractinium</i>		0		
		<i>Oocystis</i>	510	2		
		<i>Scenedesmus</i>	1,800	6		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Cyclotella</i>	1,600	5		
		<i>Diatoma</i>	210	1		
		<i>Meridion</i>	210	1		
		<i>Nitzschia</i>	1,400	4		
		CYANOPHYTA				
		Myxophyceae				
		<i>Anabaena</i>	310	1		
		<i>Anacystis</i>	7,200	22		
		<i>Anacystis incerta</i>	2,100	6		
		<i>Gomphosphaeria</i>	5,100	16		
		<i>Oscillatoria</i>	5,600	18		
TOTAL		32,000				
Sept. 9, 1976	1200	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Actinastrum</i>	380	2		
		<i>Ankistrodesmus</i>	380	2		
		<i>Chlamydomonas</i>		0		
		<i>Crucigenia</i>		0		
		<i>Dictyosphaerium</i>	3,400	16		
		<i>Elakatothrix</i>	190	1		
		<i>Gloeocactinium</i>	570	3		
		<i>Micractinium</i>		0		
		<i>Oocystis</i>		0		
		<i>Pediastrum</i>		0		
		<i>Scenedesmus</i>	380	2		
		<i>Selenastrum</i>		0		
		<i>Treubaria</i>	190	1		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Amphora</i>		0		
		<i>Cocconeis</i>		0		
		<i>Cyclotella</i>	1,100	5		
		<i>Cymbella</i>		0		
		<i>Diatoma</i>		0		
		<i>Gomphonema</i>		0		
		<i>Melosira</i>	190	1		
		<i>Navicula</i>	290	1		
		<i>Nitzschia</i>	480	2		
		<i>Pinnularia</i>		0		
		<i>Stauroneis</i>		0		
		<i>Synedra</i>		0		
		Chrysophyceae				
		<i>Ochromonas</i>		0		
		CYANOPHYTA				
		Myxophyceae				
		<i>Agmenellum</i>	8,700	41		
		<i>Anabaena</i>	1,400	7		
		<i>Anacystis</i>	2,000	9		
		<i>Anacystis incerta</i>		0		
		<i>Aphanizomenon</i>		0		
		<i>Oscillatoria</i>	480	2		
		EUGLENOPHYTA				
		Cryptophyceae				
		<i>Chroomonas</i>	480	2		
		Euglenophyceae				
		<i>Euglena</i>		0		
		<i>Trachelomonas</i>		0		
		PYRRHOPHYTA				
		Dinophyceae				
		<i>Glenodinium</i>		0		
		TOTAL		22,000		

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 1, 1975	1030	12.0	3,310	320	May 4, 1976	-	10.0	6,130	145
Oct. 14, 1975	1415	13.0	1,900	190	June 9, 1976	1300	22.5	2,420	180
Mar. 9, 1976	1140	2.0	5,180	200	July 6, 1976	-	24.5	1,860	165
Apr. 6, 1976	1000	5.0	31,600	160	Aug. 2, 1976	-	24.5	1,560	180
Apr. 14, 1976		11.0	12,000	100	Sept. 9, 1976	1200	20.0	1,330	190

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT , 1975						
14...	1415	13.0	1900	1	5.1	--
JAN , 1976						
14...	1100	.0	6950	1	19	100
FEB						
19...	1200	1.5	4490	2	24	100
MAR						
09...	1200	2.0	5120	1	14	100
APR						
14...	0900	11.0	12600	11	374	83
MAY						
04...	1230	10.0	6130	9	149	51
JUN						
09...	1300	25.5	2420	4	26	100
JUL						
06...	1115	24.5	1860	4	20	100
AUG						
02...	1230	24.5	1560	7	29	100
SEP						
09...	1200	20.0	1330	4	14	100

ST. CROIX RIVER BASIN

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI--CONTINUED

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	210	---				---	140	190	165	180	195
2	225	205	---				---	155	185	155	180	205
3	200	265	---				---	145	185	170	175	205
4	195	190	100				---	150	185	165	180	200
5	---	200	---				---	170	185	165	180	215
6	215	195	130				---	175	185	170	180	210
7	210	195	140				---	155	190	170	180	210
8	210	---	150				---	170	190	170	185	205
9	---	70	140				---	170	190	170	185	200
10	---	---	150				---	150	195	170	185	195
11	220	---	---				---	165	190	170	185	200
12	235	---	140				---	165	185	170	185	200
13	195	---	---				---	---	185	170	180	200
14	---	---	---				---	165	185	175	180	205
15	205	---	---				---	165	185	120	180	205
16	230	---	---				---	---	185	165	180	200
17	200	---	---				---	170	180	180	180	210
18	255	115	---				---	160	160	---	190	215
19	250	105	---				---	170	135	185	185	205
20	205	115	---				---	165	140	180	185	205
21	200	---	---				---	170	150	180	185	205
22	205	---	---				---	180	155	180	195	205
23	205	---	---				---	180	155	180	195	210
24	---	---	---				---	185	160	170	195	230
25	---	---	---				---	185	160	165	185	220
26	---	---	---				---	180	165	170	185	230
27	240	---	---				---	135	185	165	175	230
28	245	---	---				---	135	180	160	175	250
29	250	---	---				---	140	180	160	180	240
30	205	105	---				---	135	185	160	175	240
31	250	---	---				---	180	---	175	210	---
MONTH	---	---	---				---	169	173	170	186	212

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.0	8.5	---				---	13.5	18.5	23.0	25.5	20.0
2	11.0	8.0	---				---	12.5	19.0	23.0	24.5	20.0
3	10.5	8.0	---				---	11.0	20.5	24.0	24.0	20.0
4	10.0	8.0	1.5				---	10.0	22.0	24.0	24.0	19.5
5	---	8.5	---				---	11.5	23.0	25.0	24.0	19.0
6	12.0	8.0	2.0				---	12.0	23.0	25.0	24.5	19.0
7	13.0	9.0	1.5				---	12.0	23.0	25.0	24.5	19.0
8	13.0	---	1.5				---	12.0	24.0	25.5	24.0	19.5
9	---	8.0	2.0				---	13.5	25.0	25.5	24.0	19.5
10	---	---	0.5				---	16.0	25.0	26.5	23.5	19.5
11	11.0	---	---				---	15.5	26.0	27.0	23.0	19.0
12	11.5	---	1.0				---	15.0	26.5	26.5	24.0	19.0
13	12.0	---	---				---	---	26.0	26.5	25.0	19.0
14	---	---	---				---	15.5	25.5	26.5	24.5	18.5
15	11.0	---	---				---	16.0	25.0	26.0	24.0	18.5
16	10.5	---	---				---	---	24.0	24.0	22.5	18.0
17	11.0	---	---				---	18.0	22.5	25.0	23.0	17.5
18	9.5	4.5	---				---	17.0	21.0	---	22.5	17.5
19	10.0	---	---				---	17.0	21.0	24.0	22.0	17.5
20	10.5	---	---				---	17.5	20.0	24.5	23.5	17.5
21	11.0	---	---				---	18.0	21.0	25.0	22.5	16.5
22	10.0	---	---				---	19.0	22.0	25.0	24.5	16.5
23	9.0	---	---				---	20.5	23.0	25.5	24.0	15.0
24	---	---	---				---	19.0	24.5	25.5	24.0	14.0
25	---	---	---				---	19.0	23.0	26.0	24.5	13.0
26	---	---	---				---	19.5	23.0	26.5	24.0	13.0
27	8.5	---	---				---	11.5	20.0	22.5	26.0	13.0
28	8.0	---	---				---	12.0	20.0	23.0	26.0	11.5
29	8.0	---	---				---	13.0	19.0	23.0	26.5	12.0
30	9.0	2.0	---				---	13.5	18.0	23.0	26.5	11.5
31	8.0	---	---				---	18.0	---	26.5	20.5	---
MONTH	---	---	---				---	16.0	23.0	25.5	23.5	17.0

05341500 APPLE RIVER NEAR SOMERSET, WI

LOCATION.--LAT 45°09'30", LONG 92°43'00", IN NE 1/4 SE 1/4 SEC.21, T.31N., R.19W., ST CROIX COUNTY, HYDROLOGIC UNIT 07030005, AT NORTHERN STATES POWER COMPANY POWER PLANT 3.1 MI (5.0 KM) NORTHWEST OF SOMERSET.

DRAINAGE AREA.--555 MI² (1437 KM²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--APRIL 1975 TO SEPTEMBER 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (CDL-ONIES PER 100 ML)
OCT , 1975											
22...	0900	280	260	8.5	9.5	12	0	--	--	140	58
FEB , 1976											
03...	1100	440	290	8.0	1.0	2	2	12.1	89	86	815
03...	1400	1640	130	7.6	6.0	45	5	11.9	100	170	62
JUL											
06...	1330	334	240	8.3	23.0	2	2	7.8	94	30	950

DATE	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)
OCT , 1975											
22...	140	0	33	13	4.0	6	.2	1.2	150	10	140
FEB , 1976											
03...	130	0	30	13	3.7	6	.1	1.3	156	0	128
03...	55	6	14	4.9	1.7	6	.1	1.6	60	0	49
JUL											
06...	130	10	31	13	3.5	5	.1	.8	148	0	121

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT , 1975											
22...	.9	4.1	4.2	.5	12	172	156	.23	130	.36	.00
FEB , 1976											
03...	2.5	4.1	4.8	.1	18	169	152	.23	201	.97	.01
03...	2.4	5.1	2.5	.1	8.8	85	69	.12	376	.69	.01
JUL											
06...	1.2	5.5	3.7	.1	14	151	145	.21	136	.46	.02

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT , 1975											
22...	.36	.01	.38	.39	.75	3.3	.04	.03	10	20	3.6
FEB , 1976											
03...	.98	.13	.28	.41	1.4	6.2	.07	.07	30	20	4.7
03...	.70	.04	.79	.83	1.5	6.8	.08	.05	120	10	11
JUL											
06...	.48	.09	.51	.60	1.1	4.8	.09	.07	20	2	5.5

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

ST. CROIX RIVER BASIN

05341500 APPLE RIVER NEAR SOMERSET, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)
OCT . 1975									
22...	0900	280	1	0	<10	0	1	100	10
JUL . 1976									
06...	1330	334	0	0	10	1	0	140	20

DATE	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	CYANIDE (CN) (MG/L)
OCT . 1975								
22...	2	40	20	<.5	0	0	10	.00
JUL . 1976								
06...	0	100	2	<.5	0	0	10	.00

05344500 MISSISSIPPI RIVER AT PRESCOTT, WI

LOCATION.--LAT 44°44'45", LONG 92°48'00", IN SEC.9, T.26 N., R.20 W., PIERCE COUNTY, HYDROLOGIC UNIT 07010206, ON LEFT BANK AT PRESCOTT, 200 FT (61 M) DOWNSTREAM FROM ST. CROIX RIVER, 300 FT (91 M) SOUTH OF CHICAGO, BURLINGTON & QUINCY RAILROAD BRIDGE, 800 FT (244 M) SOUTH OF BRIDGE ON U.S. HIGHWAY 10, AND AT MILE 811.4 (1306 KM) UPSTREAM FROM OHIO RIVER.

DRAINAGE AREA.--44,800 MI² (116,000 KM²), APPROXIMATELY.

PERIOD OF RECORD.--JUNE 1928 TO CURRENT YEAR.

REVISED RECORD.--WSP 1508: 1941. WDR MN-74: 1973.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 649.50 FT (197.97 M) ABOVE MEAN SEA LEVEL. PRIOR TO AUG. 2, 1932, NONRECORDING GAGE AT RAILROAD BRIDGE 300 FT (91 M) UPSTREAM AT FOLLOWING DATUMS: JUNE 3, 1928, TO SEPT. 30, 1929, 19.27 FT (5.873 M) HIGHER; OCT. 1, 1929, TO SEPT. 30, 1930, 17.68 FT (5.389 M) HIGHER; OCT. 1, 1930, TO AUG. 1, 1932, 19.28 FT (5.877 M) HIGHER. AUG. 2, 1932, TO OCT. 30, 1938, WATER-STAGE RECORDER AT PRESENT SITE AT DATUM 19.28 FT (5.877 M) HIGHER; NOV. 1, 1938, TO SEPT. 7, 1971, WATER-STAGE RECORDER AT PRESENT SITE AT DATUM 50.00 FT (15.240 M) LOWER. AUXILIARY WATER-STAGE RECORDER 10.7 MI (17.2 KM) DOWNSTREAM FROM BASE GAGE.

COOPERATION.--RECORDS GOOD. SOME REGULATION BY RESERVOIRS, NAVIGATION DAMS, AND POWERPLANTS AT LOW AND MEDIUM STAGES. FLOOD FLOW NOT MATERIALLY AFFECTED BY ARTIFICIAL STORAGE.

AVERAGE DISCHARGE.--48 YEARS, 16,200 FT³/S (459 M³/S), 4.91 IN/YR (125 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 228,000 FT³/S (6,460 M³/S) APR. 18, 1965, GAGE HEIGHT, 43.11 FT (13.140 M); MINIMUM DAILY, 1,380 FT³/S (39.1 M³/S) JULY 13, 1940; MINIMUM GAGE HEIGHT, 15.08 FT (4.596 M) AUG. 29, 1934, PRESENT DATUM.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 72,800 FT³/S (2,060 M³/S) APR. 4, GAGE HEIGHT, 33.35 FT (10.165 M); MINIMUM DAILY, 2,500 FT³/S (70.8 M³/S) SEPT. 2; MINIMUM GAGE HEIGHT, 24.51 FT (7.471 M) NOV. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8950	10900	13300	10000	9250	14000	62800	18900	7230	7620	4400	3230
2	9530	10500	12700	9940	9130	14000	67800	17800	7330	6780	5750	2500
3	9880	10300	12800	10400	8210	13000	71000	16900	7630	7630	3840	2880
4	10400	10100	13000	8820	8950	14400	72200	16500	6720	7180	3720	3440
5	10200	10300	14100	7730	8100	14000	72000	15700	6550	6560	3890	3030
6	10600	10400	14800	8020	8560	14200	70100	14100	6640	6770	3720	2740
7	10300	10500	14400	9490	8340	14100	66300	13200	6150	5750	3830	2840
8	10500	10300	13100	8680	9080	14300	61100	13800	5730	6310	3880	2690
9	9400	10600	12700	8260	9020	14600	56500	14200	5750	6270	3660	2580
10	9160	12800	12700	9060	9310	14800	53000	13900	5800	5800	3530	2860
11	9640	12300	12700	9500	9540	15100	49300	12700	5860	6110	4540	2810
12	10000	11700	13200	9500	9390	15600	45700	11800	6660	5420	3940	2890
13	9060	13000	12800	9910	9480	16000	42200	11500	6480	5270	3680	2580
14	9520	14000	12600	9580	9500	15800	39800	11000	6100	5390	3950	2930
15	9320	14100	12200	9070	9580	16300	38100	11200	6440	4650	4040	2740
16	9920	13900	9700	9080	9530	16100	35800	10800	6120	5090	3470	3000
17	9450	13700	9720	9440	9760	17200	33600	9780	6600	4670	3720	3170
18	9550	13600	7850	9030	10200	17700	32600	9890	6820	4770	3400	2870
19	9670	13000	7950	8570	10600	18200	31700	9140	8330	4480	3300	3010
20	9210	14300	8820	8880	10500	19300	30800	8100	8350	4430	3200	3270
21	9360	15600	10600	8540	10400	20900	29600	8140	8290	4160	3340	3400
22	10400	16800	10400	8860	10100	23400	28400	8370	8300	3940	3360	3390
23	10300	16100	10300	9440	10600	24800	27700	9050	7830	4560	3400	3110
24	10100	15300	10100	8800	10700	25900	27700	7400	8260	5100	3430	2960
25	10200	14300	9360	9590	11500	28200	27000	7060	6580	4720	3480	3170
26	10400	12500	9680	8960	11500	31700	25500	6820	6460	4170	2930	3080
27	10600	10100	9970	8670	12100	33900	24900	5920	6600	4740	3080	2920
28	11500	11100	10100	8790	13100	35100	24200	7050	6890	4420	3200	3200
29	12200	12200	9490	8110	13600	37100	23400	6960	6940	4060	3130	3380
30	11800	12700	9970	8980	---	38400	21200	7170	7050	3930	3340	2500
31	11200	---	9860	9350	---	48800	---	7010	---	4260	2580	---
TOTAL	312320	377000	350970	281050	289630	656900	1292000	341860	206490	165010	112730	90050
MEAN	10070	12570	11320	9066	9987	21190	43070	11030	6883	5323	3636	3002
MAX	12200	16800	14800	10400	13600	48800	72200	18900	8350	7630	5750	3440
MIN	8950	10100	7850	7730	8100	13000	21200	5920	5730	3930	2580	2500
CFSM	.22	.28	.25	.20	.22	.47	.96	.25	.15	.12	.08	.07
IN.	.26	.31	.29	.23	.24	.55	1.07	.28	.17	.14	.09	.07
CAL YR 1975 TOTAL	8195810	MEAN	22450	MAX	112000	MIN	4190	CFSM	.50	IN	6.81	
WTR YR 1976 TOTAL	4476010	MEAN	12230	MAX	72200	MIN	2500	CFSM	.27	IN	3.72	

CHIPPEWA RIVER BASIN

05356000 CHIPPEWA RIVER AT BISHOPS BRIDGE, NEAR WINTER, WI

LOCATION.--LAT 45°50'57", LONG 91°04'44", IN SEC.23, T.39 N., R.6 W., SAWYER COUNTY, HYDROLOGIC UNIT 07050001, ON RIGHT BANK 15 FT (5 M) UPSTREAM FROM HIGHWAY BRIDGE ON COUNTY TRUNK HIGHWAY G, 3.2 MI (5.1 KM) DOWNSTREAM FROM LAKE CHIPPEWA DAM, AND 3.7 MI (6.0 KM) NORTHWEST OF WINTER.

DRAINAGE AREA.--787 MI² (2,038 KM²).

PERIOD OF RECORD.--FEBRUARY 1912 TO CURRENT YEAR. DECEMBER TO APRIL 1913, MONTHLY DISCHARGE ONLY. PUBLISHED IN WSP 1306.

REVISED RECORDS.--WSP 1206: DRAINAGE AREA. WSP 1436: 1913(M), 1915-16(M), 1919, 1920-23(M), 1924, 1925(M), 1927(M), 1926, 1929-30(M), 1939(M).

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 1,270 FT (387 M), FROM LAKE CHIPPEWA DATUM. SEE WSP 1708 OR 1726 FOR HISTORY OF CHANGES PRIOR TO JULY 23, 1930.

REMARKS.--RECORDS GOOD. FLOW REGULATION BY MOOSE LAKE AND LAKE CHIPPEWA (SEE P.235).

AVERAGE DISCHARGE.--64 YEARS, 716 FT³/S (20.28 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 7,520 FT³/S (213 M³/S) SEPT. 4, 5, 1914, GAGE HEIGHT, 11.05 FT (3.368 M); MINIMUM, 14 FT³/S (0.40 M³/S) APR. 17-20, 1925, GAGE HEIGHT, 3.25 FT (0.991 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 3,450 FT³/S (97.7 M³/S) APR. 15, GAGE HEIGHT, 7.80 FT (2.377 M); MINIMUM, 103 FT³/S (2.92 M³/S) SEPT. 10, 11, GAGE HEIGHT, 3.67 FT (1.180 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).

3.8	86	5.0	560
3.9	110	6.0	1,370
4.0	136	7.0	2,430
4.5	305	8.0	3,770

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	337	290	1270	1170	1090	986	211	1000	216	479	247	172
2	314	289	1260	1170	1090	982	246	1000	216	478	247	174
3	312	289	1250	1160	1090	981	234	999	216	476	248	172
4	312	288	1240	1160	1090	979	226	999	216	478	253	217
5	312	237	1240	1160	1090	976	224	993	216	436	250	250
6	275	196	1240	1150	1090	974	240	991	216	385	250	225
7	235	198	1230	1150	1090	970	222	989	216	356	249	163
8	234	198	1220	1150	1040	969	274	947	216	356	414	161
9	201	203	1220	1140	1040	966	338	904	216	357	216	160
10	159	231	1220	1140	1030	961	356	895	215	357	176	132
11	158	220	1220	1140	1030	959	341	601	213	354	177	105
12	159	241	1220	1130	1030	955	494	472	217	354	175	157
13	157	266	1210	1130	1030	956	654	426	216	354	176	206
14	159	325	1220	1130	1030	948	965	402	216	352	241	160
15	160	598	1210	1130	1030	945	3010	349	217	354	292	157
16	160	1100	1210	1120	1020	941	2950	328	214	354	230	157
17	160	1100	1210	1120	1020	940	2760	327	213	352	175	156
18	160	1430	1210	1120	1020	936	2410	327	223	351	174	147
19	161	1640	1200	1110	1010	936	2420	327	213	330	174	140
20	161	1630	1200	1110	1010	950	2530	326	211	313	173	140
21	161	1490	1200	1110	1010	954	2680	324	210	301	226	139
22	161	1250	1200	1110	1010	953	3080	323	209	301	270	138
23	166	1250	1190	1100	1000	950	3210	323	211	301	172	137
24	174	1250	1190	1100	996	964	3150	264	371	298	172	137
25	236	1250	1190	1100	995	759	2760	211	471	299	173	137
26	290	1240	1180	1100	992	199	2140	211	472	297	173	139
27	289	1240	1180	1100	991	208	1510	213	472	271	173	138
28	290	1240	1180	1090	988	245	1210	214	516	250	173	139
29	290	1250	1170	1090	985	348	1000	217	484	251	172	138
30	290	1280	1170	1090	---	283	1000	221	482	251	172	138
31	290	---	1170	1090	---	221	---	218	---	247	174	---
TOTAL	6923	23709	37520	34870	29937	25294	42847	16341	8210	10697	6587	4731
MEAN	223	790	1210	1125	1032	816	1428	527	274	345	212	158
MAX	337	1640	1270	1170	1090	986	3210	1000	516	479	414	250
MIN	157	196	1170	1090	985	199	211	211	209	247	172	105
CFSM	.28	1.00	1.54	1.43	1.31	1.04	1.81	.67	.35	.44	.27	.20
IN.	.33	1.12	1.77	1.65	1.42	1.20	2.03	.77	.39	.51	.31	.22
CAL YR 1975 TOTAL	229694		MEAN 629	MAX 1640	MIN 113	CFSM .80	IN 10.86					
WTR YR 1976 TOTAL	247666		MEAN 677	MAX 3210	MIN 105	CFSM .86	IN 11.71					

05356500 CHIPPEWA RIVER NEAR BRUCE, WI

LOCATION.--LAT 45°27'08", LONG 91°35'39", IN SE 1/4 SEC.5, T.34 N., R.7 E., RUSK COUNTY, HYDROLOGIC UNIT 07050001, ON RIGHT BANK 1.0 MI (1.6 KM) EAST OF BRUCE AND 1.0 MI (1.6 KM) DOWNSTREAM FROM THORNAPPLE RIVER.

DRAINAGE AREA.--1.637 MI² (4,220 KM²), APPROXIMATELY.

PERIOD OF RECORD.--DECEMBER 1913 TO CURRENT YEAR.

REVISED RECORDS.--WSP 875: 1936-38. WSP 1278: DRAINAGE AREA. WSP 1308: 1922+ 1937(M). WSP 1508: 1914-26(M), 1927, 1928-31(M), 1932, 1933(M), 1934-36, 1938.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 1,059.62 FT (322.972 M) ABOVE MEAN SEA LEVEL. PRIOR TO MAY 28, 1935, NONRECORDING GAGE AT RAILROAD BRIDGE 0.8 MI (1.3 KM) UPSTREAM AT DATUM 2.30 FT (0.701 M) HIGHER.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR. FLOW FROM 48 PERCENT OF THE DRAINAGE AREA REGULATED BY MOOSE LAKE AND LAKE CHIPPEWA (SEE P.235).

AVERAGE DISCHARGE.--62 YEARS, 1,460 FT³/S (41.35 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 25,800 FT³/S (731 M³/S) SEPT. 1, 1941, GAGE HEIGHT, 20.46 FT (6.236 M), FROM FLOODMARKS, FROM RATING CURVE EXTENDED ABOVE 20,000 FT³/S (566 M³/S); MINIMUM, 155 FT³/S (4.39 M³/S) JUNE 10, 1932, GAGE HEIGHT, 0.9 FT (0.274 M), SITE AND DATUM THEN IN USE.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 12,500 FT³/S (354 M³/S) MAR. 30, GAGE HEIGHT, 12.23 FT (3.728 M); MINIMUM, 185 FT³/S (5.24 M³/S) SEPT. 13, GAGE HEIGHT, 1.20 FT (0.366 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CURIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 29 TO MAR. 20.)

OCT. 1 TO JULY 31				AUG. 1 TO SEPT. 30			
1.4	370	6.0	4,030	1.2	185	2.0	710
1.7	532	8.0	6,410	1.5	380		
2.0	728	10.0	8,960				
4.0	2,200	12.0	12,110				

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	775	707	3200	1400	1400	1900	8230	1840	722	777	484	354
2	634	686	4000	1400	1400	2000	7350	1830	641	768	458	360
3	570	677	3900	1400	1400	2000	7440	1830	556	763	464	354
4	584	651	3800	1400	1400	2100	6310	1790	572	755	419	347
5	602	635	3700	1400	1400	2100	5330	1720	525	753	510	347
6	622	610	3600	1300	1400	2200	4800	1680	539	745	490	380
7	587	526	3500	1300	1400	2200	4700	1640	529	644	464	406
8	491	561	3300	1300	1400	2300	4500	1610	495	636	490	360
9	496	589	3000	1300	1400	2400	4300	1500	522	619	588	334
10	495	1490	2700	1300	1400	2400	4000	1450	523	616	484	341
11	457	2640	2500	1300	1500	2500	3900	1380	520	579	393	334
12	417	3140	2300	1300	1500	2600	3800	1110	491	604	413	276
13	453	3480	2300	1300	1500	2600	3700	1020	522	595	360	230
14	449	2620	2400	1300	1500	2600	3500	939	583	589	419	425
15	463	2040	2300	1300	1600	2600	3400	894	540	590	360	419
16	431	2150	2000	1300	1600	2600	3300	898	543	597	490	328
17	460	2180	1900	1300	1600	2500	3100	830	508	592	523	341
18	432	2010	1800	1400	1600	2700	3000	825	634	586	386	334
19	455	2430	1800	1400	1600	2600	3100	829	717	589	347	334
20	465	2830	1700	1400	1600	2500	3300	783	586	794	334	334
21	412	3110	1700	1400	1600	2400	3300	767	583	772	347	315
22	456	2740	1600	1400	1600	2380	3000	756	520	639	354	315
23	454	2540	1600	1400	1700	2500	2500	745	511	612	413	308
24	614	2320	1500	1400	1700	3060	2300	738	472	541	380	308
25	1030	2180	1500	1400	1800	3790	2200	700	729	566	347	308
26	1060	2110	1500	1400	1800	4180	2000	583	831	544	347	315
27	954	2090	1500	1400	1800	4930	2000	537	798	579	341	334
28	876	2170	1500	1400	1900	5720	1900	577	784	538	347	341
29	791	2100	1500	1400	1900	6300	1900	571	616	509	321	334
30	759	2300	1400	1400	---	11800	1860	630	797	491	302	324
31	731	---	1400	1400	---	11000	---	756	---	476	321	---
TOTAL	18475	56512	72400	42200	45400	107460	114020	34758	18109	19458	12696	10140
MEAN	596	1884	2335	1361	1566	3466	3801	1089	604	628	410	338
MAX	1060	3680	4000	1400	1900	11800	8230	1840	831	794	586	425
MIN	412	526	1400	1300	1400	1900	1860	537	472	476	302	230
CAL YR 1975 TOTAL	588784		MEAN 1613	MAX 8780	MIN 412							
WTR YR 1976 TOTAL	550628		MEAN 1504	MAX 11800	MIN 230							

CHIPPEWA RIVER BASIN

05360500 FLAMBEAU RIVER NEAR BRUCE, WI

LOCATION.--LAT 45°22'21", LONG 91°32'34", IN LOT 7 OF NW 1/4 SEC.2, T.33 N., R.7 W., RUSK COUNTY, HYDROLOGIC UNIT 07050002, ON RIGHT BANK 2.5 MI (4.0 KM) DOWNSTREAM FROM THORNAPPLE POWERPLANT, 6.0 MI (9.7 KM) UPSTREAM FROM MOUTH, AND 7.0 MI (11.3 KM) SOUTHEAST OF BRUCE.

DRAINAGE AREA.--1,900 MI² (4,921 KM²), REVISED.

PERIOD OF RECORD.--AUGUST 1951 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE, 1,060 FT (323 M), BY RIVER SURVEY, WSP 417.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR. FLOW REGULATED BY SEVERAL POWERPLANTS ABOVE STATION AND BY REST LAKE AND FLAMBEAU FLOWAGE RESERVOIRS (SEE P. 235). SEVERAL OBSERVATIONS OF WATER TEMPERATURE AND SPECIFIC CONDUCTANCE WERE MADE DURING THE YEAR.

AVERAGE DISCHARGE.--25 YEARS, 1,839 FT³/S (52.08 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 17,400 FT³/S (493 M³/S) MAY 1, 1954, GAGE HEIGHT, 10.90 FT (3.322 M); MINIMUM, ABOUT 100 FT³/S (2.83 M³/S) AUG. 7, 9, 1957, GAGE HEIGHT, 2.06 FT (0.628 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 9,920 FT³/S (281 M³/S) MAR. 31, GAGE HEIGHT, 7.96 FT (2.426 M); MINIMUM, 321 FT³/S (9.09 M³/S) SEPT. 27, GAGE HEIGHT, 2.28 FT (0.695 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 1 TO MAR. 29.)

2.3	315	3.7	1,550
2.8	643	4.0	1,930
3.1	905	5.0	3,480
3.4	1,210	6.0	5,420
		8.0	10,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	861	996	2400	1400	1500	1200	9480	2440	1430	1080	733	707
2	831	900	2500	1400	1400	1200	9040	2730	1580	1150	926	572
3	756	982	2500	1400	1300	1300	9020	2800	1190	1120	886	523
4	699	903	2300	1300	1200	1300	8550	2400	1070	845	819	510
5	695	856	1900	1300	1300	1300	6300	2140	978	725	851	641
6	791	813	1900	1300	1300	1300	5750	2360	1140	1030	1320	573
7	675	752	1800	1300	1300	1300	7600	2040	987	1120	1540	632
8	580	703	1700	1400	1200	1300	6030	1980	1070	1070	1030	693
9	498	965	1700	1400	1300	1300	6610	1960	1050	1150	1050	608
10	547	2590	1600	1400	1300	1400	6250	1830	1170	987	1110	592
11	718	4560	1500	1400	1300	1400	6430	1980	967	833	1070	506
12	742	5500	1500	1500	1300	1400	6290	1830	900	866	1000	489
13	649	4790	1500	1500	1300	1400	5070	1510	1120	949	895	496
14	741	4440	1600	1400	1300	1400	4260	1560	981	1050	969	584
15	622	3240	2100	1400	1200	1400	4190	1660	1070	987	896	538
16	599	2270	1900	1300	1300	1400	4320	1780	1280	954	849	444
17	545	2380	1700	1300	1300	1400	4420	1670	1620	869	854	387
18	535	2140	1600	1300	1400	1400	3980	1540	1720	891	875	437
19	511	2090	1500	1400	1600	1500	5230	1440	2020	997	935	418
20	511	2430	1400	1400	1500	1700	5350	1490	2270	1520	924	462
21	601	3000	1400	1400	1400	2100	4950	1640	2050	1110	772	425
22	693	2620	1400	1300	1300	2400	4750	1470	1410	1280	638	365
23	654	1820	1400	1300	1300	2300	5290	1400	1290	1300	627	403
24	1060	2340	1400	1200	1300	3000	5280	1240	1420	1140	816	417
25	1720	1810	1400	1200	1300	3200	5180	1220	1560	910	765	416
26	1530	1400	1400	1300	1300	3500	4330	1280	1290	1070	699	380
27	2500	1150	1300	1300	1300	3800	4070	1130	1170	911	772	339
28	1730	1650	1300	1300	1300	4200	3520	1190	1080	885	657	384
29	1500	1840	1300	1300	1300	5200	2690	1240	1010	910	701	407
30	1550	2430	1400	1200	---	6340	2620	1180	1210	838	733	374
31	959	---	1400	1200	---	9000	---	1270	---	699	743	---
TOTAL	27603	64360	51700	41500	39400	72340	168850	53400	39103	31246	27454	14722
MEAN	890	2145	1668	1339	1324	2334	5628	1723	1303	1008	886	491
MAX	2500	5500	2500	1500	1600	9000	9480	2800	2270	1520	1540	707
MIN	498	703	1300	1200	1200	900	2620	1130	900	699	627	339
CAL YR 1975 TOTAL	678120		MEAN 1858	MAX 11000	MIN 498							
WTR YR 1976 TOTAL	630678		MEAN 1723	MAX 9480	MIN 339							

05362000 JUMP RIVER AT SHELDON, WI

LOCATION.--LAT 45°18'29", LONG 90°57'23", IN SEC.26, T.33 N., R.5 W., RUSK COUNTY, HYDROLOGIC UNIT 07050004, ON RIGHT BANK JUST DOWNSTREAM FROM HIGHWAY BRIDGE IN SHELDON, 1,500 FT (460 M) UPSTREAM FROM SHOULDER CREEK AND 11 MI (18 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--574 MI² (1,467 KM²).

PERIOD OF RECORD.--JULY 1915 TO CURRENT YEAR.

REVISED RECORDS.--WSP 975: 1938. WSP 1175: DRAINAGE AREA. WSP 1438: 1916-17(M), 1919(M), 1920, 1921(M), 1922, 1923-26(M), 1927, 1928-31(M), 1932, 1933-37(M), 1945-46(M), 1948-50(M).

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 1,092.75 FT (33.070 M) ABOVE MEAN SEA LEVEL. PRIOR TO FEB. 9, 1939, AND SEPT. 1, 1941 TO APR. 1, 1953, FEB. 18, 1954 TO SEPT. 27, 1964, NONRECORDING GAGE AT SAME SITE AND DATUM. APR. 2, 1953 TO FEB. 18, 1954, NONRECORDING GAGE IN CREAMERY WELLHOUSE 400 FT (122 M) UPSTREAM AT SAME DATUM. FEB. 9, 1939 TO AUG. 31, 1941, AND FROM SEPT. 27, 1964, WATER-STAGE RECORDER AT PRESENT SITE AND DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR.

AVERAGE DISCHARGE.--61 YEARS, 514 FT³/S (14.56 M³/S), 12.16 IN/YR (309 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE OBSERVED, 46,000 FT³/S (1,300 M³/S) AUG. 31, 1941, GAGE HEIGHT, 18.8 FT (5.73 M) FROM FLOODMARK, FROM RATING CURVE EXTENDED ABOVE 13,000 FT³/S (368 M³/S) ON BASIS OF CONTRACTED-OPENING MEASUREMENT OF PEAK FLOW; MINIMUM OBSERVED, 11 FT³/S (0.31 M³/S) DEC. 18, 1943, GAGE HEIGHT, 3.99 FT (1.216 M).

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 3,500 FT³/S (99.1 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)		GAGE HEIGHT (FT) (M)	
NOV. 11	2100	5,240	148	9.20	2.804
MAR. 25	1500	ICE JAM		*15.15	4.618
MAR. 31	0400	*10,800	306	11.55	3.520

MINIMUM DISCHARGE, 23 FT³/S (0.65 M³/S) AUG. 26, 27, GAGE HEIGHT, 3.08 FT (0.939 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 26 TO MAR. 26.)

OCT. 1 TO MAY 4				MAY 5 TO SEPT. 30			
3.5	76	6.0	1,230	3.0	22	3.7	126
4.0	184	7.0	2,130	3.1	25	4.2	272
4.5	362	9.0	4,880	3.2	33	5.0	600
5.0	600	11.0	9,300	3.4	62		
		12.0	12,200				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	197	720	230	170	290	6600	580	110	56	40	25
2	121	181	660	220	170	300	4830	639	110	54	41	25
3	113	170	560	220	170	290	4290	637	100	51	37	25
4	109	158	490	220	170	280	3520	571	98	45	34	26
5	102	151	460	220	170	280	2910	477	96	42	37	26
6	98	143	410	210	170	280	2710	436	90	42	40	25
7	92	139	450	200	170	280	2580	421	86	43	43	24
8	87	136	460	200	170	280	2300	381	82	42	53	24
9	85	155	450	190	170	280	1910	343	78	39	46	24
10	85	1790	430	190	170	300	1770	300	76	38	43	24
11	81	4760	400	180	170	320	2240	258	74	36	41	24
12	83	4760	380	170	160	340	2040	225	72	35	41	24
13	87	3550	340	160	160	350	1590	202	74	32	40	24
14	89	2440	360	160	190	370	1290	187	76	31	40	24
15	94	1600	400	150	200	390	1140	180	120	32	39	24
16	94	1170	420	150	200	410	1070	180	110	32	36	24
17	90	957	350	140	210	440	997	216	110	32	34	24
18	89	819	300	140	220	460	1050	268	200	31	32	25
19	92	753	290	140	240	480	1640	258	190	33	31	25
20	90	896	280	140	250	540	1640	214	170	73	30	26
21	87	1330	270	150	260	600	1400	182	150	68	28	26
22	83	1340	260	150	250	700	2000	160	140	76	26	27
23	92	1180	250	150	230	900	2100	138	120	73	25	27
24	113	920	240	150	210	1200	2000	121	110	61	24	26
25	318	605	240	160	230	1600	1660	113	100	52	24	26
26	549	380	230	160	240	2200	1410	104	92	44	23	26
27	460	380	230	160	250	3000	1070	98	80	39	26	27
28	360	390	230	160	260	5000	817	92	74	39	31	27
29	290	400	230	160	280	7690	679	94	64	38	25	26
30	241	480	220	170	---	9780	596	98	59	39	24	29
31	212	---	220	170	---	10100	---	100	---	40	24	---
TOTAL	4716	32330	11250	5370	5950	49930	62249	8267	3111	1388	1058	761
MEAN	152	1078	363	173	205	1611	2075	267	104	44.8	34.1	25.4
MAX	549	4760	720	230	280	10100	6800	639	200	76	53	29
MIN	81	136	220	140	170	260	596	92	59	31	23	24
CFSM	.26	1.88	.63	.30	.36	2.61	3.61	.47	.18	.08	.06	.04
IN.	.31	2.10	.73	.35	.39	3.24	4.03	.54	.20	.09	.07	.05
CAL YR 1975	TOTAL	202842	MEAN	556	MAX	8440	MIN	36	CFSM	.97	IN	13.15
WTR YR 1976	TOTAL	186380	MEAN	509	MAX	10100	MIN	23	CFSM	.89	IN	12.08

NOTE.--NO GAGE-HEIGHT RECORD DEC. 31 TO JAN. 19, AND MAY 26 TO JUNE 29.

CHIPPEWA RIVER BASIN

05365500 CHIPPEWA RIVER AT CHIPPEWA FALLS, WI

LOCATION.--LAT 44°55'37", LONG 91°24'33", IN LOT 1, SEC.12, T.28 N., R.9 W., CHIPPEWA COUNTY, HYDROLOGIC UNIT 07050005, ON RIGHT BANK AT CHIPPEWA FALLS, 1.0 MI (1.6 KM) DOWNSTREAM FROM DUNCAN CREEK.

DRAINAGE AREA.--5,600 MI² (14,500 KM²); APPROXIMATELY.

PERIOD OF RECORD.--JUNE 1888 TO CURRENT YEAR. MONTHLY DISCHARGE ONLY FOR SOME PERIODS, PUBLISHED IN WSP 1308.

REVISED RECORDS.--WSP 785: 1934(M). WSP 1508: 1897, 1905, 1918(M), 1924(M).

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 798.46 FT (243.371 M) ABOVE MEAN SEA LEVEL. PRIOR TO JANUARY 1914, NONRECORDING GAGE, AND JANUARY 1914 TO JUNE 19, 1932, WATER-STAGE RECORDER AT SITE 1 MI (1.6 KM) UPSTREAM AT DIFFERENT DATUM. JUNE 19, 1932, TO CURRENT YEAR, WATER-STAGE RECORDER AT PRESENT SITE AND DATUM.

REMARKS.--RECORDS GOOD. CONSIDERABLE REGULATION BY MOOSE LAKE, LAKE CHIPPEWA, REST LAKE, FLAMBEAU FLOWAGE, AND LAKE WISSOTA RESERVOIRS (SEE P. 235). DIURNAL FLUCTUATION CAUSED BY HYDROELECTRIC PLANT 1.1 MI (1.8 KM) UPSTREAM. SEVERAL OBSERVATIONS OF WATER TEMPERATURE AND CONDUCTANCE WERE MADE DURING THE YEAR.

AVERAGE DISCHARGE.--88 YEARS, 5,110 FT³/S (144.7 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 102,000 FT³/S (2,890 M³/S) SEPT. 1, 1941, GAGE HEIGHT, 24.8 FT (7.56 M); MINIMUM, 22 FT³/S (0.623 M³/S) APR. 2, 1934, GAGE HEIGHT, 0.63 FT (0.192 M); MINIMUM DAILY, 40 FT³/S (1.13 M³/S) FEB. 4, 1917.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--A STAGE OF 26.94 FT (8.211 M) OCCURRED SEPT. 10, 1884, SITE AND DATUM IN USE JUNE 1932.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 51,400 FT³/S (1,460 M³/S) APR. 1, GAGE HEIGHT, 17.66 FT (5.383 M); MINIMUM DAILY, 249 FT³/S (7.05 M³/S) AUG. 8.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).

1.0	173	8.0	11,200
1.5	325	11.0	20,700
2.0	583	14.0	33,000
3.0	1,440	16.0	42,400
5.0	4,440	18.0	53,300

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2340	2210	8880	4000	4300	5350	46800	6090	4860	1940	370	1350
2	2030	1430	9520	4430	5000	4720	36500	5130	2150	2400	1350	846
3	3360	2690	9340	3610	5400	4410	31800	7350	2910	1260	747	459
4	543	1720	9340	3030	4180	4730	29000	7930	2660	552	1160	418
5	553	2730	9410	3910	4320	5060	22800	7510	461	1140	2900	812
6	1480	3050	6080	3300	4620	5350	15200	5940	1710	2370	2570	685
7	1880	3660	7240	3230	5300	4720	19400	5900	1900	2480	657	1600
8	2200	357	5980	4400	4730	4870	22600	4400	2340	2150	249	987
9	1870	984	6160	4160	3890	3290	18300	4870	2520	1280	2140	742
10	2000	7690	6210	3840	4680	4980	14500	4950	2530	1960	2260	1440
11	918	15400	4690	2860	4240	4880	15200	4390	3000	641	1770	762
12	382	20200	4370	7460	4810	5220	17000	4200	352	1330	1290	517
13	2010	18100	4420	4180	4430	4620	15300	4090	1070	1940	1690	2280
14	1320	17300	4860	4040	3230	4230	12600	3930	2270	2200	1080	1320
15	2260	10400	7990	4160	3940	4450	10900	3520	1110	1380	270	636
16	1520	7630	5590	3970	4580	4400	9740	2330	844	1750	1690	1520
17	2450	7480	4800	3270	4930	4560	12600	4500	3560	1100	1320	765
18	375	8090	4850	2540	4670	4580	12800	3020	3890	690	1660	943
19	315	7770	5070	3950	4270	5020	12300	3610	759	2310	1130	418
20	1810	8900	4740	2960	4830	6430	14000	3390	2650	2980	1170	485
21	1950	10100	5070	4030	5260	8270	14300	2750	4050	2980	1720	1630
22	1630	10000	3670	5120	4480	8420	14400	1980	3130	3190	473	490
23	2280	9950	4670	5240	4420	8470	16700	2230	1740	2190	762	537
24	2710	9210	4730	4580	4310	8960	17600	2670	2220	445	995	1270
25	2350	6910	4480	3790	4870	9470	17100	1810	1570	549	1350	449
26	3790	5440	4260	5910	4060	9500	15700	270	2010	2110	1790	311
27	4500	2420	4460	4300	5270	10700	11900	4150	2310	1950	919	1890
28	4840	4260	4150	5200	6560	25500	9630	263	3120	2060	472	636
29	3780	5710	4110	5010	4960	31300	9310	817	2530	1590	639	1030
30	3630	7020	4220	4570	---	39900	6550	2540	2620	1870	2150	641
31	3710	---	4380	4810	---	49000	---	4500	---	521	1240	---
TOTAL	66786	218811	177740	129860	134540	305360	522530	121030	68846	53308	39983	27869
MEAN	2154	7294	5734	4189	4639	9850	17420	3904	2295	1720	1290	929
MAX	4840	20200	9520	7460	6560	49000	46800	7930	4860	3190	2900	2280
MIN	315	357	3670	2540	3230	3290	6550	263	352	445	249	311
CAL YR 1975	TOTAL	1978576	MEAN	5421	MAX	38200	MIN	315				
WTR YR 1976	TOTAL	1866663	MEAN	5100	MAX	49000	MIN	249				

NOTE.--NO GAGE-HEIGHT RECORD JAN. 7 TO FEB. 11.

CHIPPEWA RIVER BASIN

219

05368000 HAY RIVER AT WHEELER, WI

LOCATION.--LAT 45°02'52", LONG 91°54'39", IN SW 1/4 SEC.25, T.30 N., R.13 W., DUNN COUNTY, HYDROLOGIC UNIT 07050007, ON RIGHT BANK 25 FT (7.6 M) DOWNSTREAM FROM HIGHWAY BRIDGE IN WHEELER, 1.8 MI (2.9 KM) UPSTREAM FROM OTTER CREEK, AND 2.4 MI (3.9 KM) DOWNSTREAM FROM SOUTH FORK HAY RIVER.

DRAINAGE AREA.--426 MI² (1,103 KM²).

PERIOD OF RECORD.--OCTOBER 1950 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1338: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 889.30 FT (271.059 M), ABOVE MEAN SEA LEVEL. PRIOR TO MAR. 25, 1951, NONRECORDING GAGE.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

AVERAGE DISCHARGE.--26 YEARS, 294 FT³/S (8.326 M³/S), 9.37 IN/YR (238 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 13,600 FT³/S (385 M³/S) MAR. 31, 1967, GAGE HEIGHT, 15.04 FT (4.584 M), FROM RATING CURVE EXTENDED ABOVE 9,000 FT³/S (255 M³/S); MINIMUM, 55 FT³/S (1.56 M³/S) MAR. 13, 1954, GAGE HEIGHT, 2.32 (0.707 M), RESULT OF FREEZEUP.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--MAXIMUM STAGE SINCE 1915, 16.6 FT (5.06 M) APRIL 1934, FROM FLOODMARKS.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGE ABOVE BASE OF 1,000 FT³/S (28.3 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)
MAR. 21	1500	*2,720	77.0	9.23	2.813
MAR. 25	0600	2,190	62.0	8.47	2.582
MAR. 31	1500	2,620	74.2	9.09	2.771

MINIMUM DISCHARGE, 164 FT³/S (4.64 M³/S) SEPT. 12, 13, GAGE HEIGHT, 2.68 FT (0.817 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 30 TO FEB.) 22.)

2.6	160	7.0	1,420
4.0	420	8.0	1,920
5.5	835	10.0	3,400

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	246	225	360	230	260	429	2130	358	267	206	192	181
2	242	223	350	240	260	351	1490	344	255	203	190	181
3	240	222	330	230	260	366	1110	325	243	201	189	178
4	239	222	310	250	260	326	876	317	236	198	191	174
5	237	222	290	270	260	313	746	313	233	197	208	170
6	234	220	290	270	250	298	670	307	229	195	208	170
7	230	223	280	270	250	311	614	300	228	201	195	169
8	228	223	270	260	250	287	571	294	225	198	192	169
9	228	239	270	250	250	298	524	291	222	194	191	169
10	230	420	260	240	250	289	510	288	227	193	190	167
11	228	548	260	250	250	279	514	282	228	193	194	167
12	228	590	260	240	250	316	497	278	225	190	195	167
13	228	650	260	240	240	303	478	279	229	189	193	171
14	228	457	300	240	230	319	484	279	224	190	193	186
15	227	392	300	250	260	293	528	276	228	192	190	185
16	225	363	290	250	270	288	478	271	227	191	186	179
17	223	345	290	260	280	272	447	266	224	190	188	176
18	223	334	290	260	260	295	496	260	245	189	191	176
19	223	341	290	260	260	375	655	258	243	192	189	174
20	223	406	300	270	250	1380	543	257	230	195	186	174
21	223	695	290	270	250	2580	488	257	223	199	182	173
22	223	525	280	270	250	1720	467	254	217	196	181	172
23	225	434	270	280	261	1140	444	251	215	192	179	172
24	240	379	260	280	301	1590	520	246	214	189	177	169
25	249	330	260	270	410	2130	510	244	221	186	177	169
26	239	332	250	270	576	1900	433	236	216	186	176	171
27	232	334	250	260	789	1880	403	239	214	187	177	174
28	228	306	240	260	748	1770	381	245	211	195	175	175
29	225	304	230	260	564	1380	370	247	211	213	172	173
30	223	340	230	260	---	1780	364	246	209	206	173	171
31	225	---	220	260	---	2510	---	256	---	196	174	---
TOTAL MEAN	7142	10844	8630	7970	9249	27768	18741	8564	6819	6042	5794	5202
MAX	230	361	278	257	319	896	625	276	227	195	187	173
MIN	249	695	360	280	789	2580	2130	358	267	213	208	186
CFSM	223	220	220	230	230	272	364	236	209	186	172	167
IN.	.54	.85	.65	.60	.75	2.10	1.47	.65	.53	.46	.44	.41
IN.	.62	.95	.75	.70	.81	2.42	1.64	.75	.60	.53	.51	.45
CAL YR 1975	TOTAL	141646	MEAN 388	MAX 7120	MIN 150	CFSM .91	IN 12.37					
WTR YR 1976	TOTAL	122765	MEAN 335	MAX 2580	MIN 167	CFSM .79	IN 10.72					

CHIPPEWA RIVER BASIN

05369000 RED CEDAR RIVER AT MENOMONIE, WI

LOCATION.--LAT 44°53'02", LONG 91°55'57", IN NW 1/4 SEC.26, T.28 N., R.13 W., OUNN COUNTY, HYDROLOGIC UNIT 07050007, ON RIGHT BANK AT MENOMONIE, 900 FT (274 M) DOWNSTREAM FROM POWERPLANT OF NORTHERN STATES POWER CO., AND 1,000 FT (305 M) DOWNSTREAM FROM WILSON CREEK.

DRAINAGE AREA.--1,760 MI² (4,560 KM²), APPROXIMATELY

PERIOD OF RECORD.--JUNE 1907 TO SEPTEMBER 1908, MAY 1913 TO CURRENT YEAR. MONTHLY DISCHARGE ONLY FOR SOME PERIODS, PUBLISHED IN WSP 1308.

REVISED RECORDS.--WSP 805; DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 780 FT (237.7 M) ABOVE MEAN SEA LEVEL (NORTHERN STATES POWER CO. BENCH MARK). PRIOR TO SEPT. 3, 1908, NONRECORDING GAGE AT SITE 1 MI (1.6 KM) DOWNSTREAM AT DIFFERENT DATUM. MAY 9, 1913, TO SEPT. 30, 1923, WATER-STAGE RECORDER AT SAME SITE AT DATUM 0.42 FT (0.128 M) LOWER THAN PRESENT DATUM.

REMARKS.--RECORDS GOOD. FLOW REGULATED BY POWERPLANTS AT MENOMONIE AND CEDAR FALLS.

AVERAGE DISCHARGE.--64 YEARS, 1,243 FT³/S (35.20 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 40,000 FT³/S (1,133 M³/S) APR. 4, 1934, GAGE HEIGHT, 16.0 FT (4.88 M), FROM FLOODMARKS, FROM RATING CURVE EXTENDED ABOVE 27,000 FT³/S (765 M³/S) ON BASIS OF COMPUTED FLOW OVER CEDAR FALLS DAM 6 MI (10 KM) UPSTREAM; MINIMUM, 21 FT³/S (0.59 M³/S) DEC. 9, 1928, GAGE HEIGHT, 0.65 FT (0.198 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 9,480 FT³/S (268 M³/S) MAR. 26, GAGE HEIGHT, 6.18 FT (1.884 M); MINIMUM, 193 FT³/S (5.47 M³/S) JUNE 16, GAGE HEIGHT, 0.99 FT (0.302 M); MINIMUM DAILY, 456 FT³/S (12.9 M³/S) AUG. 8.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).

1.5	449	4.0	3,990
2.0	940	5.0	6,140
3.0	2,390	6.0	8,910

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1040	1050	1870	1250	1090	2100	7190	978	1120	714	671	697
2	1180	1030	1460	1400	1010	1520	6040	1380	1070	927	742	782
3	1300	1150	1450	1020	949	1520	5250	1400	921	829	691	1210
4	1150	1040	1460	787	1100	1760	4510	1510	980	623	779	1340
5	1090	1100	1560	1030	941	1580	4080	1360	1080	753	836	1050
6	1080	1090	2040	1150	946	1290	3670	1410	972	696	818	1020
7	1120	1120	1390	928	1070	1520	3260	1440	949	971	780	923
8	1130	1020	1440	944	1030	1480	3180	1290	1220	817	456	852
9	1060	1510	1550	953	1110	1620	2880	1290	1000	646	739	641
10	1160	1810	1550	1110	971	1550	2500	1340	1060	752	707	708
11	1150	2320	1670	1070	1070	1570	2490	1270	1060	592	775	740
12	1050	2350	1450	1150	1110	1910	2630	1220	968	731	580	583
13	1040	2560	1450	1120	1030	1500	2660	1230	786	581	647	887
14	1070	2500	1990	1100	1120	1550	2390	1210	1040	657	616	731
15	1080	2290	1730	1000	1200	1440	2430	1270	929	684	657	799
16	1020	2260	1340	1000	1530	1330	2450	1230	989	734	552	720
17	1020	1700	1090	1090	1490	1280	2510	1150	1070	528	652	807
18	1000	1400	1030	970	1390	1410	2600	1090	1270	645	634	693
19	986	1510	1200	1040	1400	1770	2570	1140	1130	807	652	764
20	1010	2010	1220	1110	1470	2730	2940	974	984	570	634	737
21	1060	1860	1260	1000	1260	3180	2840	1080	963	815	534	687
22	1000	2180	1330	1040	1290	3950	2730	892	935	723	552	735
23	1020	1860	1330	1100	1300	3750	2660	901	897	763	626	565
24	1140	1840	1460	1090	1570	3640	2860	1010	855	660	517	811
25	1440	1240	1350	978	1700	4760	2770	947	892	587	599	689
26	1360	1540	1400	1150	2250	6060	2520	953	949	644	665	708
27	1120	1470	1260	1120	2470	5110	2610	1020	907	736	537	699
28	1130	1330	1320	1020	2450	5080	2000	1210	859	923	563	697
29	1190	2300	1300	997	2240	5050	1230	1120	948	853	579	706
30	1070	2110	1320	1020	---	5410	514	1030	846	818	599	725
31	1120	---	1300	1050	---	6410	---	1140	---	715	572	---
TOTAL	34386	50550	44590	32787	39557	84830	90964	36485	29649	22494	19961	23706
MEAN	1109	1685	1438	1058	1364	2736	3032	1177	988	726	644	790
MAX	1440	2560	2040	1400	2470	6410	7190	1510	1270	971	836	1340
MIN	986	1020	1030	787	941	1280	514	892	786	528	456	565

CAL YR 1975 TOTAL 567167 MEAN 1554 MAX 10700 MIN 594
WTR YR 1976 TOTAL 509959 MEAN 1393 MAX 7190 MIN 456

05369500 CHIPPEWA RIVER AT DURAND, WI
(NATIONAL STREAM-QUALITY ACCOUNTING NETWORK STATION)

LOCATION.--44°37'40" N, LONG 91°58'18" W, IN SW 1/4 SEC.21, T.25 N., R.13 W., PEPIN COUNTY, HYDROLOGIC UNIT 07050005, ON LEFT BANK IN DURAND, 75 FT (23 M) DOWNSTREAM FROM BRIDGE ON U.S. HIGHWAY 10, AND 9.5 MI (15.3 KM) DOWNSTREAM FROM RED CEDAR RIVER.

DRAINAGE AREA.--9,010 MI² (23,340 KM²), APPROXIMATELY.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--JULY 1928 TO CURRENT YEAR.

REVISED RECORDS.--WSP 785: 1930, 1934(M). WSP 875: 1930 (MONTHLY AND YEARLY RUNOFF). WSP 925: 1938. WSP 1508: 1929(M), 1932.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 694.59 FT (211.711 M) ABOVE MEAN SEA LEVEL. PRIOR TO DEC. 9, 1930, NONRECORDING GAGE AT BRIDGE 400 FT (122 M) DOWNSTREAM AT SAME DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, AND THOSE BELOW 2,700 FT³/S (76.5 M³/S), WHICH ARE FAIR. FLOW REGULATED BY POWERPLANTS, MOOSE LAKE, LAKE CHIPPEWA, REST LAKE, FLAMBEAU FLOWAGE, AND LAKE WISCONSIN ON CHIPPEWA AND FLAMBEAU RIVERS (SEE P. 235).

AVERAGE DISCHARGE.--48 YEARS, 7,524 FT³/S (213.1 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 123,000 FT³/S (3,483 M³/S) APR. 2, 1967, GAGE HEIGHT, 16.93 FT (5.160 M); MINIMUM OBSERVED, 1,020 FT³/S (28.9 M³/S) NOV. 24, 1950, GAGE HEIGHT, 0.12 FT (0.037 M).

EXTREMES OUTSIDE OF PERIOD OF RECORD.--A STAGE OF 18.4 FT (5.61 M), FROM FLOOD MARKS (LEVELS BY CORPS OF ENGINEERS) OCCURRED SEPT. 12, 1884, AND HAS NOT BEEN EXCEEDED SINCE.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 62,300 FT³/S (1,764 M³/S) APR. 2, GAGE HEIGHT, 13.30 FT (4.05 M); MINIMUM DAILY, ABOUT 2,100 FT³/S (59.5 M³/S) AUG. 24, SEPT. 13.

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(SHIFTING-CONTROL METHOD USED OCT. 1-19, MAY 22-31; STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 18 TO MAR. 3.)

OCT. 1 TO JUNE 3				JUNE 4 TO SEPT. 30			
0.6	2,700	5.0	12,700	0.2	2,020	2.0	5,210
1.0	3,250	8.0	23,700	1.0	3,370	3.0	7,350
2.0	5,050	11.0	40,700				
3.0	7,350	13.0	59,000				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4690	5670	11500	7000	8200	10000	52000	8890	6200	4400	2760	2700
2	4510	5050	12800	7800	8600	9200	58000	8740	6750	4140	2400	2500
3	3950	3550	13900	6200	7200	8000	51400	8510	5250	3980	2500	2400
4	4870	4930	13600	5200	7200	8440	41700	9990	5150	3370	2400	2500
5	3130	4310	13100	6600	7600	8970	36100	10200	4580	2900	2700	2500
6	2980	4600	12400	6000	7600	8350	28900	9490	3530	2900	3770	2600
7	3130	4920	9070	5600	8600	8520	21100	8520	3840	4040	4070	2600
8	3840	5370	10100	7000	7600	8210	25000	8260	4490	4180	2880	2600
9	3870	3590	8830	7000	6800	8350	27000	7240	4540	3930	2660	2300
10	3720	5330	9420	6800	7600	7510	20300	7170	4600	3590	2690	2200
11	3720	11500	8460	5400	7200	7960	18800	7190	4890	3420	3440	2400
12	2970	19800	8290	5600	8000	9940	19100	6670	5000	2780	3390	2200
13	2760	23300	7420	7200	7400	9810	20700	6830	3590	3030	2940	2100
14	3660	20800	9090	6800	4600	8870	18300	6490	3100	3280	3190	2500
15	3240	19700	9310	6600	7000	8680	15400	6330	4490	3620	2680	2600
16	3870	13200	10900	5800	8200	8470	14200	6070	3620	3550	2400	2300
17	3390	11700	9030	4700	8600	8770	14200	5410	3320	2990	2500	2500
18	3790	11000	8400	6600	8000	8410	16400	6910	5550	2990	2600	2400
19	2970	10700	8000	5600	7800	9250	16500	5770	5760	2960	2500	2400
20	2760	11200	7800	6600	8600	11300	17200	6260	3820	3330	2400	2400
21	3290	13200	8400	8200	8800	14000	19900	5960	4890	4310	2400	2400
22	3770	13900	6800	8400	7800	17400	18700	5280	5480	4310	2600	2600
23	3550	13700	8000	7600	7800	19100	19200	3940	5100	4510	2300	2500
24	4150	13700	7800	5800	8000	18000	22500	4310	4250	3820	2100	2400
25	5050	11800	7600	9400	8800	17000	23300	4490	4340	2780	2200	2400
26	4780	10100	7600	7600	8600	19800	22400	3820	3860	2640	2400	2500
27	6080	8040	7400	8200	10000	19000	20800	3480	4200	3120	2600	2600
28	6500	5820	7200	8000	11000	22500	16200	5210	4290	3730	2400	2500
29	6140	7760	7200	7400	10000	29000	13500	3340	4910	3530	2300	2300
30	5860	11100	7400	7800	---	37000	10900	3210	4340	3620	2400	2200
31	5450	---	7400	7400	---	43000	---	4260	---	3100	2700	---
TOTAL	126440	309340	284220	211900	233200	432810	719700	198240	137730	108850	83270	73100
MEAN	4079	10310	9168	6835	8041	13960	23990	6395	4591	3511	2686	2437
MAX	6500	23300	13900	9400	11000	43000	58000	10200	6750	4510	4070	2700
MIN	2760	3550	6800	4700	4600	7510	10900	3210	3100	2640	2100	2100
CAL YR 1975 TOTAL		3096950		MEAN 8485	MAX 51100	MIN 2760						
WTR YR 1976 TOTAL		2918800		MEAN 7975	MAX 58000	MIN 2100						

NOTE.--NO GAGE-HEIGHT RECORD AUG. 16 TO SEPT. 30.

CHIPPEWA RIVER BASIN

05369500 CHIPPEWA RIVER AT DURAND, WI--CONTINUED
 (NATIONAL STREAM-QUALITY ACCOUNTING NETWORK STATION)
 (NATIONAL PESTICIDE MONITORING NETWORK STATION)
 (NATIONAL RADIOCHEMICAL SURVEILLANCE STATION)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1964-65, 1967, 1973 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: MARCH 1975 TO CURRENT YEAR.
 WATER TEMPERATURES: MARCH 1975 TO CURRENT YEAR.
 SUSPENDED-SEDIMENT DISCHARGE: MAY 1974 TO CURRENT YEAR.

REMARKS.--SEDIMENT RECORDS ARE POOR. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 20 PERCENT OF THE YEAR ARE ESTIMATED.

COOPERATION.--PESTICIDE SAMPLES WERE COLLECTED BY THE U.S. GEOLOGICAL SURVEY AND WERE ANALYZED BY ENVIRONMENTAL PROTECTION AGENCY.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (WATER YEAR 1975): MAXIMUM DAILY, 300 MICROMHOS MAY 11, 1975; MINIMUM DAILY, 100 MICROMHOS MAY 29, JUNE 20, 21, 1975.
 WATER TEMPERATURES (WATER YEAR 1975): MAXIMUM DAILY, 30.0°C AUG. 1, 1975; MINIMUM DAILY, 0.0°C ON MANY DAYS DURING WINTER PERIOD.
 SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 329 MG/L SEPT. 11, 1975; MINIMUM DAILY MEAN, 1 MG/L DEC. 30, 1974, JAN. 2, 6, 1975, JUNE 23, 26, AUG. 25, 1976. MAXIMUM OBSERVED, 591 MG/L SEPT. 11, 1975; MINIMUM OBSERVED, 1 MG/L DEC. 30, 1974, JAN. 2, 6, 1975, JUNE 23, JULY 1, AUG. 25, 28, 1976.
 SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 45,000 TONS (40,800 TONNES) APR. 29, 1975; MINIMUM DAILY, 5.9 TONS (5.4 TONNES) AUG. 25, 1976.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 104 MG/L FEB. 28; MINIMUM DAILY MEAN, 1 MG/L JUNE 23, 26, AUG. 25. MAXIMUM OBSERVED, 164 MG/L NOV. 11; MINIMUM OBSERVED, 1 MG/L JUNE 23, JULY 1, AUG. 25, 28.
 SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 7,270 TONS (6,600 TONNES) MAR. 29; MINIMUM DAILY, 5.9 TONS (5.4 TONNES) AUG. 25.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT , 1975										
13...	1430	2800	230	8.5	16.0	2	--	--	200	160
NOV										
11...	0900	11100	140	7.5	7.0	10	--	--	2500	85100
DEC										
15...	1400	9400	160	8.1	.0	5	--	--	1000	--
JAN , 1976										
13...	1200	7320	165	7.5	.0	2	--	--	210	88
FEB										
20...	1100	8600	175	7.0	1.0	3	11.0	81	120	2700
MAR										
10...	1130	7510	150	7.2	2.0	2	11.9	90	817	818
APR										
14...	1400	18100	85	7.1	10.0	2	--	--	832	70
MAY										
06...	1130	10200	95	7.3	11.0	2	--	--	77	140
JUN										
16...	1515	3670	175	7.6	20.5	2	--	--	450	43
JUL										
13...	1400	3030	170	8.8	26.0	4	--	--	140	88
AUG										
03...	1130	2640	210	7.5	23.0	2	9.1	110	130	82700
SEP										
07...	1345	2630	215	--	25.0	5	10.4	130	90	90

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

05369500 CHIPPEWA RIVER AT DURAND, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAP- BONATE (CO3) (MG/L)
OCT , 1975										
13...	82	13	20	7.9	3.6	9	.2	1.4	85	0
NOV										
11...	62	9	15	5.9	2.8	9	.2	1.5	64	0
DEC										
15...	57	12	14	5.3	2.6	9	.2	1.5	54	0
JAN , 1976										
13...	59	3	16	4.6	2.9	9	.2	1.3	68	0
FEB										
20...	60	9	15	5.5	2.9	9	.2	1.6	62	0
MAR										
10...	61	8	15	5.7	2.9	9	.2	1.7	64	0
APR										
14...	31	6	7.6	2.8	1.6	10	.1	1.2	30	0
MAY										
06...	40	8	9.5	4.0	1.8	9	.1	1.1	39	0
JUN										
16...	64	11	16	5.9	2.8	8	.2	1.2	65	0
JUL										
13...	62	5	15	5.9	3.0	9	.2	1.1	69	0
AUG										
03...	75	12	18	7.3	3.8	10	.2	1.1	77	0
SEP										
07...	82	11	20	7.7	4.0	9	.2	1.1	86	--

DATE	ALKA- LINITY AS CACO3 (MG/L)	CARRON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SD4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (REST- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)
OCT , 1975										
13...	70	.4	6.4	4.7	.3	9.0	91	97	.12	688
NOV										
11...	53	3.2	6.3	4.5	.2	7.6	85	75	.12	2550
DEC										
15...	44	.7	8.0	4.4	.3	11	98	74	.13	2490
JAN , 1976										
13...	56	3.4	6.7	4.9	.1	13	99	85	.13	1960
FEB										
20...	51	9.9	8.9	4.2	.2	12	108	81	.15	2510
MAR										
10...	53	6.4	8.8	4.9	.3	13	100	84	.14	2030
APR										
14...	25	3.8	7.6	3.0	.1	7.7	65	47	.09	3180
MAY										
06...	32	3.1	6.1	2.0	.1	7.0	67	51	.09	1850
JUN										
16...	53	2.6	7.9	3.6	.1	7.9	87	77	.12	862
JUL										
13...	57	.2	5.4	4.3	.1	8.8	96	78	.13	785
AUG										
03...	63	3.9	7.0	4.8	.1	11	101	91	.14	720
SEP										
07...	71	--	10	7.6	.1	11	113	104	.15	802

05369500 CHIPPEWA RIVER AT DURAND, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (ND3) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARRON (C) (MG/L)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M
OCT , 1975										
13...	.23	.81	1.0	4.6	.09	5.0	.800	1.40	.50	.30
NOV										
11...	.37	1.1	1.5	6.5	.23	--	--	--	--	--
DEC										
15...	.69	.54	1.2	5.4	.12	--	--	--	--	--
JAN , 1976										
13...	.79	.54	1.3	5.9	.10	8.5	.000	.000	.00	.00
FEB										
20...	.66	.66	1.3	5.8	.14	--	--	--	--	--
MAR										
10...	.68	.69	1.4	6.1	.11	--	--	--	--	--
APR										
14...	.37	.65	1.0	4.5	.08	15	--	--	--	--
MAY										
06...	.25	.68	.93	4.1	.09	--	5.46	9.69	.03	.95
JUN										
16...	.39	.55	.94	4.2	.09	--	--	--	--	--
JUL										
13...	.21	.95	1.2	5.1	.13	10	8.85	13.8	.01	18
AUG										
03...	.24	.58	.82	3.6	.14	--	--	--	--	--
SEP										
07...	.22	.60	.82	3.6	.14	--	--	--	--	--

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDED ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT , 1975												
13...	1430	2800	1	1	0	1	0	1	<10	<10	0	0
JAN , 1976												
13...	1200	7320	0	0	0	0	0	0	100	90	10	0
APR												
14...	1400	18100	0	0	0	1	0	1	<10	0	<10	2
JUL												
13...	1400	3030	2	2	0	1	0	1	<10	0	<10	1

DATE	SUS- PENDED COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDED COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS- PENDED LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)
OCT , 1975											
13...	0	0	10	10	0	580	160	3	3	0	90
JAN , 1976											
13...	0	0	10	10	0	470	250	5	1	4	40
APR											
14...	1	1	0	0	0	610	200	4	1	3	50
JUL											
13...	0	1	0	0	0	450	80	4	2	2	110

DATE	SUS- PENDED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS- PENDED MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDED SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDED ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT , 1975											
13...	40	50	<.5	.0	<.5	0	0	0	60	0	60
JAN , 1976											
13...	10	30	<.5	.0	<.5	0	0	0	20	10	10
APR											
14...	30	20	<.5	.0	<.5	0	0	0	10	10	0
JUL											
13...	100	10	<.5	.0	<.5	1	1	0	40	20	20

05369500 CHIPPEWA RIVER AT DURAND, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL PCB (UG/L)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ATRAZINE (UG/L)	ATRAZINE IN BOTTOM MATERIAL (UG/KG DRY SOLIDS)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)
OCT , 1975											
13...	1430	2800	--	--	.00	.0	--	--	.0	0	.00
FEB , 1976											
20...	1100	8600	--	--	.00	--	.00	--	.0	--	.00
APR											
14...	1400	18100	.0	.00	.00	--	--	--	.0	--	.00
MAY											
06...	1130	10200	--	--	.00	.0	.00	.0	.0	0	.00
SEP											
07...	1345	2630	--	--	.00	--	.00	--	.0	--	.00

DATE	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	DI-AZINON IN BOTTOM MATERIAL (UG/KG)	TOTAL DIELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)
OCT , 1975										
13...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00
FEB , 1976										
20...	--	.00	--	.00	--	.00	--	.00	--	.00
APR										
14...	--	.00	--	.00	--	.00	--	.00	--	.00
MAY										
06...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00
SEP										
07...	--	.00	--	.00	--	.00	--	.00	--	.00

DATE	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)
OCT , 1975										
13...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00
FEB , 1976										
20...	--	.00	--	.00	--	.00	--	.00	--	.00
APR										
14...	--	.00	--	.00	--	.00	--	.00	--	.00
MAY										
06...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00
SEP										
07...	--	.00	--	.00	--	.00	--	.00	--	.00

CHIPPEWA RIVER BASIN

05369500 CHIPPEWA RIVER AT DURAND, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL METH-OXY-CHLOR (UG/L)	METHOX-YCHLOR IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL METHYL-PARA-THION (UG/L)	METHYL-PARA-THION IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL METHYL-TRI-THION (UG/L)	METHYL-TRI-THION IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL PARA-THION (UG/L)	PARA-THION IN BOTTOM MA-TERIAL (UG/KG)	SIMA-ZINE TOTAL (UG/L)	SIMA-ZINE IN BOTTOM MATERIAL (UG/KG DRY SOLIDS)
OCT , 1975										
13...	.00	.0	.00	.0	.00	.0	.00	.0	--	--
FEB , 1976										
20...	.00	--	.00	--	.00	--	.00	--	--	--
APR										
14...	--	--	.00	--	.00	--	.00	--	--	--
MAY										
06...	.00	.0	.00	.0	.00	.0	.00	.0	--	.0
SEP										
07...	.00	--	.00	--	.00	--	.00	--	.00	--

DATE	TOTAL TOX-APHENE (UG/L)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TRI-THION IN BOTTOM MA-TERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MA-TERIAL (UG/KG)	TOTAL 2,4,5-T (UG/L)	2,4,5-T IN BOTTOM MA-TERIAL (UG/KG)	TOTAL SILVEX (UG/L)	SILVEX IN BOTTOM MA-TERIAL (UG/KG)
OCT , 1975										
13...	0	0	.00	.0	--	--	--	--	--	--
FEB , 1976										
20...	0	--	.00	--	.00	--	.00	--	.00	--
APR										
14...	0	--	.00	--	--	--	--	--	--	--
MAY										
06...	0	0	.00	.0	.00	0	.00	0	.00	0
SEP										
07...	0	--	.00	--	.00	--	.00	--	.00	--

RADIOCHEMICAL ANALYSES

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)	SUS-PENDED GROSS BETA AS CS-137 (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED URANIUM (U) (UG/L)
APR , 1976										
14...	1400	18100	<.7	.7	2.3	<.4	1.8	<.4	.05	.40
MAY										
06...	1130	10200	<1.2	<.4	3.2	<.4	2.5	<.4	.05	--
JUN										
16...	1515	3670	<1.2	<.4	2.9	<.4	2.3	<.4	.01	.07
JUL										
13...	1400	3030	2.9	<.4	3.0	<.4	2.4	<.4	.02	.05
AUG										
03...	1130	2640	<1.0	<.4	5.1	.4	4.1	<.4	.04	.10
SEP										
07...	1345	2630	<1.7	<.4	2.7	.7	2.1	.6	.05	.05

05369500 CHIPPEWA RIVER AT DURAND, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct. 13, 1975	1430	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	130	1	
		<i>Pandorina</i>	2,100	10	
		<i>Pediastrum</i>	1,000	5	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Cyclotella</i>	12,000	58	
		<i>Cymbella</i>	130	1	
		<i>Diatoma</i>	390	2	
		<i>Gomphonema</i>	1,100	5	
		<i>Melosira</i>	1,500	7	
		<i>Navicula</i>	520	2	
		<i>Nitzschia</i>	130	1	
		<i>Stephanodiscus</i>	520	2	
		CYANOPHYTA			
		Myxophyceae			
		<i>Aphanizomenon</i>	520	2	
		<i>Oscillatoria</i>	780	4	
		EUGLENOPHYTA			
		Cryptophyceae			
<i>Cryptomonas</i>	130	1			
TOTAL	22,000				
Nov. 11, 1975	0900	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Pediastrum</i>	1,400	8	
		<i>Scenedesmus</i>	470	3	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	470	3	
		<i>Cocconeis</i>	110	1	
		<i>Cyclotella</i>	6,000	33	
		<i>Cymbella</i>	110	1	
		<i>Diatoma</i>	110	1	
		<i>Eunotia</i>	110	1	
		<i>Fragilaria</i>	350	2	
		<i>Gomphonema</i>	110	1	
		<i>Melosira</i>	5,900	32	
		<i>Navicula</i>	1,600	9	
		<i>Neidium</i>	230	1	
		<i>Nitzschia</i>	350	2	
		<i>Surirella</i>	110	1	
		CYANOPHYTA			
		Myxophyceae			
<i>Lyngbya</i>	590	3			
TOTAL	18,000				
Dec. 15, 1975	1400	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	20	5	
		<i>Crucigenia</i>	14	3	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	27	6	
		<i>Asterionella</i>		0	
		<i>Cyclotella</i>	140	31	
		<i>Cymbella</i>	7	2	
		<i>Epithemia</i>		0	
		<i>Gomphonema</i>	7	2	
		<i>Gyrosigma</i>	7	2	
		<i>Melosira</i>	75	17	
		<i>Navicula</i>	100	23	
		<i>Nitzschia</i>	41	9	
		<i>Surirella</i>	7	2	
		Chrysophyceae			
		<i>Dinobryon</i>		0	
		CYANOPHYTA			
		Myxophyceae			
<i>Aphanizomenon</i>		0			
TOTAL	440				
Jan. 13, 1976	1200	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	5	6	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Asterionella</i>	5	6	
		<i>Cocconeis</i>	5	6	
		<i>Cyclotella</i>	22	22	
		<i>Gomphonema</i>	5	6	
		<i>Navicula</i>	22	22	
		<i>Nitzschia</i>	11	11	
		<i>Rhoicosphenia</i>	5	6	
		<i>Synedra</i>	5	6	
		Chrysophyceae			
		<i>Mallomonas</i>	5	6	
		PYRRHOPHYTA			
		Dinophyceae			
		<i>Peridinium</i>	5	6	
		TOTAL	97		

CHIPPEWA RIVER BASIN
05369500 CHIPPEWA RIVER AT DURAND, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTDPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method	
Feb. 20, 1976	1100	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Ankistrodesmus</i>		0		
		<i>Scenedesmus</i>		0		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Achnanthes</i>		0		
		<i>Cyclotella</i>		0		
		<i>Diatoma</i>		0		
		<i>Fragilaria</i>		0		
		<i>Gomphonema</i>	74	1		
		<i>Melosira</i>		0		
		<i>Meridion</i>		0		
		<i>Navicula</i>		0		
		<i>Nitzschia</i>	74	1		
		<i>Rhoicosphenia</i>		0		
		<i>Rhopalodia</i>		0		
		<i>Surirella</i>		0		
		<i>Synedra</i>		0		
		CYANOPHYTA				
		Myxophyceae				
		<i>Oscillatoria</i>	12,000	99		
TOTAL		12,000				
Mar. 10, 1976	1130	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Ankistrodesmus</i>	44	2		
		<i>Chlamydomonas</i>	29	2		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Achnanthes</i>	29	2		
		<i>Amphora</i>	15	1		
		<i>Asterionella</i>	29	2		
		<i>Cocconeis</i>	15	1		
		<i>Cyclotella</i>	44	2		
		<i>Cymbella</i>	29	2		
		<i>Fragilaria</i>	29	2		
		<i>Gomphonema</i>	44	2		
		<i>Meridion</i>	15	1		
		<i>Navicula</i>	73	4		
		<i>Nitzschia</i>	120	6		
		<i>Synedra</i>		0		
		CYANOPHYTA				
		Myxophyceae				
		<i>Anacystis</i>	1,200	66		
		<i>Aphanizomenon</i>		0		
<i>Oscillatoria</i>	120	6				
TOTAL		1,900				
Apr. 14, 1976	1400	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Ankistrodesmus</i>	78	2		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Asterionella</i>		0		
		<i>Cyclotella</i>	2,200	55		
		<i>Gomphonema</i>	78	2		
		<i>Melosira</i>	700	18		
		<i>Navicula</i>	310	8		
		<i>Nitzschia</i>	390	10		
		EUGLENOPHYTA				
		Euglenophyceae				
<i>Trachelomonas</i>	230	6				
TOTAL		4,000				
May 6, 1976	1130	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Ankistrodesmus</i>		0		
		<i>Golenkinia</i>		0		
		<i>Scenedesmus</i>		0		
		<i>Tetrastrum</i>	220	4		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Asterionella</i>	54	1		
		<i>Cyclotella</i>	3,700	73		
		<i>Fragilaria</i>	54	1		
		<i>Melosira</i>	490	10		
		<i>Navicula</i>	160	3		
		<i>Nitzschia</i>	380	7		
		<i>Stephanodiscus</i>		0		
		<i>Synedra</i>		0		
		<i>Tabellaria</i>		0		
		CYANOPHYTA				
		Myxophyceae				
		<i>Anacystis</i>		0		
		TOTAL		5,100		

05309500 CHIPPEWA RIVER AT DURAND, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method			
June 16, 1976	1515	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		<i>Actinastrum</i>	580	4				
		<i>Ankistrodesmus</i>	290	2				
		<i>Coelastrum</i>	580	4				
		<i>Dictyosphaerium</i>	1,100	8				
		<i>Golenkinia</i>	73	1				
		<i>Micractinium</i>	580	4				
		<i>Pandorina</i>	1,200	8				
		<i>Scenedesmus</i>	150	1				
		<i>Tetraedron</i>	73	1				
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Amphora</i>	73	1				
		<i>Cyclotella</i>	1,700	13				
		<i>Cymbella</i>	73	1				
		<i>Gomphonema</i>	73	1				
		<i>Melosira</i>	1,100	8				
		<i>Navicula</i>	440	3				
		<i>Nitzschia</i>	290	2				
		<i>Synedra</i>	150	1				
		CYANOPHYTA						
		Myxophyceae						
		<i>Anabaena</i>	580	4				
		<i>Anacystis</i>	2,500	18				
		<i>Oscillatoria</i>	2,200	16				
		EUGLENOPHYTA						
		Cryptophyceae						
		<i>Cryptomonas</i>	73	1				
		TOTAL		14,000				
		July 13, 1976	1400	CHLOROPHYTA				Grab sample
				Chlorophyceae				
				<i>Actinastrum</i>		2,400	3	
<i>Ankistrodesmus</i>	850			1				
<i>Chlamydomonas</i>				0				
<i>Coelastrum</i>	1,900			3				
<i>Dictyosphaerium</i>	480			1				
<i>Kirchneriella</i>	1,100			2				
<i>Micractinium</i>	5,200			8				
<i>Oocystis</i>	360			1				
<i>Pandorina</i>	480			1				
<i>Pediastrum</i>				0				
<i>Scenedesmus</i>	5,300			8				
<i>Selenastrum</i>				0				
<i>Sphaerocystis</i>				0				
<i>Tetraedron</i>				0				
<i>Tetrastrum</i>				0				
<i>Westella</i>	1,600			2				
CHRYSOPHYTA								
Bacillariophyceae								
<i>Cyclotella</i>	480			1				
<i>Cymbella</i>				0				
<i>Fragilaria</i>				0				
<i>Melosira</i>	480			1				
<i>Navicula</i>				0				
<i>Nitzschia</i>	360			1				
CYANOPHYTA								
Myxophyceae								
<i>Anabaena</i>	850			1				
<i>Anacystis</i>	44,000			63				
<i>Aphanizomenon</i>	2,400			3				
EUGLENOPHYTA								
Cryptophyceae								
<i>Cryptomonas</i>		0						
TOTAL		69,000						
Aug. 3, 1976	1130	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		<i>Ankistrodesmus</i>	910	1				
		<i>Golenkinia</i>	460	1				
		<i>Kirchneriella</i>	1,100	2				
		<i>Oocystis</i>	1,800	2				
		<i>Scenedesmus</i>	7,300	10				
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Cyclotella</i>	23,000	32				
		<i>Gomphonema</i>	460	1				
		<i>Navicula</i>	460	1				
		<i>Nitzschia</i>	680	1				
		CYANOPHYTA						
		Myxophyceae						
<i>Anacystis</i>	37,000	50						
TOTAL		74,000						

CHIPPEWA RIVER BASIN

05369500 CHIPPEWA RIVER AT DURAND, WI--CONTINUEO

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Sept. 7, 1976	1345	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		Actinastrum		0	
		Ankistrodesmus	320	1	
		Coelastrum		0	
		Crucigenia	260	1	
		Dictyosphaerium	520	1	
		Kirchneriella	1,000	2	
		Oocystis	520	1	
		Ourococcus		0	
		Pediastrum		0	
		Scenedesmus	1,300	3	
		Selenastrum		0	
		Tetraedron		0	
		Westella		0	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Achnanthes		0	
		Cyclotella	910	2	
		Fragilaria		0	
		Melosira	840	2	
		Navicula	970	2	
		Nitzschia		0	
		Synedra		0	
		CYANOPHYTA			
		Myxophyceae			
		Agmenellum		0	
		Anabaena	7,800	17	
		Anacystis	28,000	62	
		Aphanizomenon	450	1	
		Oscillatoria	1,500	3	
		PYRRHOPHYTA			
		Dinophyceae			
		Ceratium		0	
		Glenodinium		0	
		TOTAL	45,000		

WATER QUALITY DATA

Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance	Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance
Oct. 6, 1975	1400	16.5	2,920	260	May 6, 1976	-	11.0		95
Oct. 13, 1975	1430	18.0		230	May 27, 1976	1200	19.5	3,100	190
Nov. 11, 1975	1300	7.0	11,300	140	June 3, 1976	1200	23.0		120
Jan. 13, 1976	1500	0.0	7,320	165	June 4, 1976	0900	23.0	6,140	120
Mar. 10, 1976	1030	2.0		150	June 16, 1976	1515	20.5	3,500	175
Mar. 25, 1976	1500	4.5	16,200	140	July 1, 1976	1400	20.0	5,150	140
Apr. 2, 1976	1700	4.5	61,400	-	July 13, 1976	-	26.0	3,030	170
Apr. 6, 1976	1000	5.5		-	Aug. 3, 1976	-	23.0	2,640	210
Apr. 14, 1976	-	10.0	18,100	85	Aug. 31, 1976	1300	22.5	2,970	200
May 4, 1976	1030	12.0	10,600	110	Sept. 7, 1976	-	25.0	2,630	215

05369500 CHIPPEWA RIVER AT OURAND, WI--CONTINUED

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS- SED. SIEVE DIAM. % FINER THAN .062 MM
NOV , 1975						
11...	0900	7.0	11100	130	3900	52
JAN , 1976						
13...	1200	.0	7320	5	99	80
MAR						
10...	1120	2.0	7510	38	771	16
APR						
02...	1300	4.5	61300	295	48800	6
14...	1400	10.0	18100	57	2790	17
JUN						
16...	1515	20.5	3670	7	69	88
AUG						
03...	1120	23.0	2640	8	57	82
31...	1250	22.5	2700	11	80	81
31...	1300	22.5	2700	18	131	81
SEP						
07...	1345	25.0	2630	8	57	80

EWS →

← "Box" sample

3220

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .006 MM
NOV , 1975							
11...	0900	11100	130	3900	17	21	25
APR , 1976							
02...	1300	61300	295	48800	--	--	--

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
NOV , 1975								
11...	30	46	52	55	73	83	100	
APR , 1976								
02...	--	--	8	11	24	62	100	

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
OCT , 1975												
07...	1120	3360	--	1	3	54	86	94	97	100	--	--
NOV												
11...	0900	11100	--	1	2	43	78	90	94	97	99	100
APR , 1976												
06...	1148	29400	0	0	1	28	84	93	95	97	99	100
14...	1400	18100	--	--	0	12	84	95	98	99	100	--
MAY												
06...	1300	9510	0	0	2	55	92	98	99	100	--	--
JUN												
03...	1200	5900	--	0	1	24	71	88	94	97	100	--
JUL												
01...	1230	5150	0	0	3	25	52	62	72	84	97	--
AUG												
31...	1300	2700	--	0	6	44	68	74	80	90	100	--

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05369500 CHIPPEWA RIVER AT DURAND, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)				
	OCTOBER				NOVEMBER				DECEMBER				JANUARY				FEBRUARY				MARCH		
1	13	162	17	266	8	244	8	151	17	376	56	1510											
2	16	203	16	226	7	229	13	274	20	464	58	1440											
3	15	157	11	105	6	215	5	84	9	175	40	864											
4	18	250	15	212	5	183	2	28	9	175	66	1510											
5	12	101	12	140	4	141	6	107	12	246	60	1460											
6	12	98	11	139	5	158	4	65	12	246	55	1240											
7	15	123	16	218	6	141	3	45	20	464	50	1150											
8	14	149	22	325	7	196	8	151	12	246	46	1010											
9	11	120	12	121	9	214	8	151	7	129	42	939											
10	12	129	17	259	11	282	7	129	10	205	33	681											
11	12	123	96	2890	14	312	3	44	9	175	29	632											
12	9	68	69	3640	17	381	3	45	15	324	31	827											
13	10	73	36	2230	21	419	8	156	11	220	32	859											
14	14	141	18	1010	24	601	8	147	10	124	34	817											
15	9	81	15	797	28	702	6	107	9	170	34	796											
16	11	118	15	535	32	932	4	63	16	354	35	806											
17	6	55	15	474	36	883	2	25	20	464	37	875											
18	11	112	15	445	36	816	6	107	15	324	36	825											
19	6	48	15	435	35	756	3	45	13	274	36	911											
20	5	41	15	454	34	716	6	107	20	464	45	1370											
21	5	44	15	534	30	680	15	332	22	523	59	2270											
22	10	108	15	562	10	184	18	408	13	274	77	3600											
23	5	45	15	554	25	540	12	246	13	274	85	4380											
24	11	130	15	554	23	484	4	63	15	324	87	4230											
25	16	232	14	451	16	328	25	634	21	499	90	4100											
26	10	129	14	381	14	287	12	246	20	464	90	4820											
27	16	275	13	275	10	200	15	332	40	1080	44	2250											
28	10	175	11	170	8	156	15	324	104	3090	57	3780											
29	10	166	15	311	8	156	12	240	42	1130	94	7270											
30	17	279	9	272	10	200	14	295	---	---	69	5400											
31	17	253	---	---	10	200	12	240	---	---	60	4670											
MONTH	---	4188.0	---	18985.0	---	11938.0	---	5391.0	---	13277.0	---	67292.0											

DAY	MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)				
	APRIL				MAY				JUNE				JULY				AUGUST				SEPTEMBER		
1	60	4670	9	225	22	378	10	118	11	82	8	58											
2	88	11800	42	984	14	265	11	120	6	39	6	40											
3	76	10700	40	919	10	143	8	85	8	54	6	39											
4	51	5700	52	1410	16	230	8	73	6	39	6	40											
5	33	3250	42	1150	10	118	8	62	7	51	6	40											
6	29	2260	34	865	9	82	8	62	8	81	7	49											
7	28	1600	30	706	8	81	8	87	7	77	7	49											
8	27	1850	27	631	7	85	8	90	6	50	7	49											
9	27	1960	23	452	6	76	9	95	6	43	5	31											
10	30	1650	22	441	10	125	10	98	5	36	5	30											
11	37	1880	20	397	10	146	11	105	5	46	6	39											
12	45	2330	10	190	11	154	13	94	4	39	5	30											
13	47	2630	16	293	5	48	11	93	4	32	4	23											
14	46	2270	16	282	5	42	10	93	4	34	6	40											
15	47	1960	14	239	4	54	10	97	3	23	7	49											
16	43	1630	12	197	6	58	9	90	6	39	5	31											
17	37	1400	10	142	6	50	9	72	7	47	6	40											
18	31	1380	9	168	7	101	9	72	7	49	6	39											
19	27	1200	8	128	3	53	8	66	7	47	6	39											
20	23	1070	16	273	2	25	8	72	6	39	6	39											
21	20	1070	14	231	4	59	14	162	6	39	6	39											
22	18	919	11	160	2	28	13	155	7	49	7	49											
23	17	868	12	127	1	14	11	137	5	31	6	40											
24	16	950	13	158	2	17	11	111	4	23	6	39											
25	15	917	12	146	3	37	8	60	1	5.9	6	39											
26	14	823	9	93	1	10	11	76	6	39	6	40											
27	13	709	5	42	2	22	11	92	4	39	7	49											
28	12	517	15	210	3	30	11	110	1	6.5	6	40											
29	11	400	17	154	4	55	11	104	5	31	5	31											
30	10	297	17	147	7	84	11	107	6	39	5	30											
31	---	---	19	214	---	---	11	92	7	51	---	---											
MONTH	---	70660.0	---	11774.0	---	2670.0	---	2950.0	---	1300.4	---	1190.0											

TOTAL LOAD FOR YEAR: 211615.4 TONS.

CHIPPEWA RIVER BASIN

05370000 EAU GALLE RIVER AT SPRING VALLEY, WI

LOCATION.--LAT 44°51'10", LONG 92°34'17", IN SE 1/4 NE 1/4 SEC.6, T.27 N., R.15 W., PIERCE COUNTY, HYDROLOGIC UNIT 07050005, ON RIGHT BANK 770 FT (235 M) DOWNSTREAM FROM FLOOD CONTROL DAM, 1,500 FT (460 M) UPSTREAM FROM MINES CREEK, AT SPRING VALLEY.

DRAINAGE AREA.--64.8 MI² (167.8 KM²).

PERIOD OF RECORD.--MARCH 1944 TO CURRENT YEAR.

REVISED RECORDS.--WRD WIS. 1967: 1966.

GAGE.--WATER-STAGE RECORDER AND V-NOTCH SHARP-CRESTED WEIR. DATUM OF GAGE IS MEAN SEA LEVEL (LEVELS BY CORPS OF ENGINEERS). PRIOR TO JULY 31, 1957, NONRECORDING GAGE AT SITE 850 FT (260 M) DOWNSTREAM AT DATUM OF 912.45 FT (278.115 M) ABOVE MEAN SEA LEVEL. AUG. 1, 1957, TO JUNE 6, 1966, NONRECORDING GAGE AT DOWNSTREAM SITE AT DATUM OF 910.45 FT (277.505 M) ABOVE MEAN SEA LEVEL. JUNE 7, 1966, TO OCT. 31, 1966, NONRECORDING GAGE AT DOWNSTREAM SITE AT DATUM OF 909.45 FT (277.200 M) ABOVE MEAN SEA LEVEL.

REMARKS.--RECORDS GOOD. LOW FLOW SLIGHTLY REGULATED AND HIGH FLOW COMPLETELY REGULATED BY FLOOD-CONTROL DAM 770 FT (235 M) UPSTREAM.

AVERAGE DISCHARGE.--6 YEARS (1969-76) 30.4 FT³/S (0.861 M³/S), 6.37 IN/YR (162 MM/YR) SINCE OPERATION OF FLOOD-CONTROL RESERVOIR.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 7,000 FT³/S (198 M³/S) APR. 15, 1954, GAGE HEIGHT, 12.50 FT (3.810 M), DATUM THEN IN USE; NO FLOW AUG. 11-15, 1971, FLOW SHUT OFF AT FLOOD-CONTROL DAM UPSTREAM; MINIMUM OBSERVED PRIOR TO DAM CONSTRUCTION PERIOD, 5.8 FT³/S (0.16 M³/S) SEPT. 25, 27, 28, 30, 1949.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--MAXIMUM STAGE SINCE AT LEAST 1894, THAT OF SEPT. 18, 1942, 19.98 FT (6.090 M) WITH DATUM AT 909.45 FT (277.200 M) ABOVE MEAN SEA LEVEL; FROM FLOODMARKS, DISCHARGE, 33,000 FT³/S (930 M³/S) ESTIMATED BY CORPS OF ENGINEERS ON BASIS OF SLOPE-AREA MEASUREMENT BY GEOLOGICAL SURVEY OF PEAK DISCHARGE OF 39,000 FT³/S (1,100 M³/S) AT ELMWOOD, DRAINAGE AREA, 91.9 MI² (238.0 KM²).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 1,040 FT³/S (29.4 M³/S) MAR. 20, GAGE HEIGHT, 916.47 FT (279.340 M); MINIMUM, 9.0 FT³/S (0.255 M³/S) SEPT. 29, GAGE HEIGHT, 913.19 FT (278.34 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CURIC FEET PER SECOND).

13.3	11	14.3	71
13.4	12	14.6	131
13.7	19	15.0	251
14.0	36	15.5	472
		16.0	760

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	15	76	16	15	42	229	23	18	15	14	14
2	16	15	42	16	15	31	265	22	18	14	13	13
3	16	15	32	16	16	27	109	21	17	14	13	13
4	16	15	27	16	15	25	62	21	16	14	13	12
5	16	15	25	16	15	24	42	21	15	14	16	11
6	16	15	30	16	15	24	34	20	15	14	14	12
7	16	16	34	16	15	22	32	20	15	16	13	12
8	16	16	28	16	15	21	29	19	15	15	13	12
9	17	19	24	16	15	20	28	20	15	14	13	12
10	16	68	22	17	15	19	27	19	17	14	12	11
11	16	133	20	17	16	19	25	19	20	14	16	11
12	16	246	19	17	16	84	24	19	19	13	15	11
13	16	96	19	17	15	90	24	20	17	13	14	13
14	16	38	77	17	15	74	25	20	16	13	13	16
15	16	30	56	17	23	50	26	20	18	15	12	14
16	15	26	38	17	39	35	26	20	17	14	12	13
17	15	24	27	16	56	28	24	19	16	13	19	12
18	15	23	21	16	63	27	50	18	22	13	21	12
19	15	22	19	16	48	230	91	18	18	16	17	13
20	15	160	19	16	39	450	45	18	17	16	15	13
21	16	160	18	17	33	98	32	18	16	14	13	12
22	16	58	18	16	29	59	27	17	15	14	13	12
23	17	36	18	16	27	61	27	17	15	13	13	12
24	19	29	18	16	38	78	112	17	15	13	12	11
25	17	25	18	16	172	57	91	17	16	12	12	12
26	16	23	18	15	222	50	45	17	16	13	15	12
27	16	21	18	15	229	49	31	17	16	13	15	12
28	15	21	17	15	122	49	26	19	15	16	13	12
29	15	26	17	16	71	76	24	19	16	19	12	12
30	15	209	17	16	---	346	24	19	15	16	12	12
31	15	---	17	16	---	234	---	19	---	15	13	---
TOTAL	494	1615	849	501	1424	2499	1656	593	496	442	431	369
MEAN	15.9	53.8	27.4	16.2	49.1	80.6	55.2	19.1	16.5	14.3	13.9	12.3
MAX	19	246	77	17	229	450	265	23	22	19	21	16
MIN	15	15	17	15	15	19	24	17	15	12	12	11
CFSM	.25	.83	.42	.25	.76	1.24	.85	.29	.25	.22	.21	.19
IN.	.28	.93	.49	.29	.82	1.43	.95	.34	.28	.25	.25	.21
CAL YR 1975 TOTAL	15970		MEAN 43.8	MAX 1280	MIN 12	CFSM .68	IN 9.17					
WTR YR 1976 TOTAL	11369		MEAN 31.1	MAX 450	MIN 11	CFSM .48	IN 6.53					

RESERVOIRS IN CHIPPEWA RIVER BASIN

THE FIVE RESERVOIRS LISTED BELOW ARE USED TO STABILIZE THE FLOW OF THE CHIPPEWA AND FLAMBEAU RIVERS FOR POWER UTILIZATION, AND ARE ALSO USED FOR RECREATIONAL PURPOSES. THE FIRST FOUR ARE OPERATED BY CHIPPEWA-FLAMBEAU IMPROVEMENT CO. THE REMAINING ONE IS OPERATED BY THE NORTHERN STATES POWER CO., WHICH ALSO FURNISHES THE GAGE HEIGHTS AND CAPACITY TABLES FOR ALL THE RESERVOIRS. MONTH-END CONTENTS ARE COMPUTED BY THE GEOLOGICAL SURVEY. THE USABLE CAPACITY OF THESE RESERVOIRS IS USUALLY LESS IN SUMMER THAN THE WINTER, BECAUSE THE ALLOWABLE SUMMER DRAWDOWN IS LIMITED BY THE DEPARTMENT OF NATURAL RESOURCES IN THE INTEREST OF RIPARIAN PROPERTY OWNERS. THERE ARE OCCASIONALLY FORMAL OR INFORMAL CHANGES IN CAPACITY AND IN MINIMUM DRAWDOWN LEVELS. USABLE CAPACITY FIGURES LISTED BELOW ARE FOR WINTER REGULATIONS.

- 05355400 MOOSE LAKE ON WEST FORK CHIPPEWA RIVER, LAT 46°02'00", LONG 91°04'32", IN NE 1/4 SEC.14, T.41 N., R.6 W., SAWYER COUNTY, 15.0 MI (24.1 KM) NORTH OF WINTER, WIS., COMPLETED IN 1893, HAS A USABLE CAPACITY OF 400,000,000 FT³ (11,000,000 M³). DRAINAGE AREA, 225 MI² (583 KM²). DATUM OF GAGE IS AT MEAN SEA LEVEL (NORTHERN STATES POWER CO. BENCH MARK).
- 05355600 LAKE CHIPPEWA ON CHIPPEWA RIVER, LAT 45°53'20", LONG 91°04'40", IN SE 1/4 SEC.2, T.39 N., R.6 W., SAWYER COUNTY, 3.2 MI (5.2 KM) UPSTREAM FROM GEOLOGICAL SURVEY RIVER-GAGING STATION, 5.5 MI (8.8 KM) NORTHWEST OF WINTER, WIS., COMPLETED IN 1923, HAS A USABLE CAPACITY OF 10,000,000,000 FT³ (283,000,000 M³). DRAINAGE AREA, 775 MI² (2,007 KM²). DATUM OF GAGE IS AT MEAN SEA LEVEL (NORTHERN STATES POWER CO. BENCH MARK).
- 05357300 REST LAKE ON MANITOWISH RIVER, LAT 46°08'20", LONG 89°53'05", IN NW 1/4 SEC.9, T.42 N., R.5 E., VILAS COUNTY, 6.2 MI (10 KM) EAST OF MANITOWISH, WIS., USED AS A RESERVOIR SINCE 1887, HAS A CAPACITY OF 660,000,000 FT³ (19,000,000 M³) BETWEEN GAGE HEIGHTS 105.00 FT (32.00 M) AND 108.50 FT (33.07 M). THIS RESERVOIR INCLUDES NINE LAKES CONTROLLED BY THE SAME DAM. DRAINAGE AREA, 243 MI² (629 KM²). ALTITUDE OF GAGE IS 1,600 FT (488 M), BY U.S. GEOLOGICAL SURVEY TOPOGRAPHIC MAP.
- 05357400 FLAMBEAU FLOWAGE ON NDRTH FORK FLAMBEAU RIVER, LAT 46°04'13", LONG 90°13'23", IN SE 1/4 SEC.34, T.42 N., R.2 E., IRON COUNTY, 0.5 MI (0.8 KM) UPSTREAM FROM DISCONTINUED GEOLOGICAL SURVEY RIVER-GAGING STATION, 10.2 MI (16.4 KM) SOUTHWEST OF MERCER, WIS., COMPLETED IN 1929, HAS A USABLE CAPACITY OF 5,895,000,000 FT³ (167,000,000 M³). DRAINAGE AREA, 666 MI² (1,725 KM²). DATUM OF GAGE IS AT MEAN SEA LEVEL (NORTHERN STATES POWER CO. BENCH MARK).
- 05364200 LAKE WISSOTA ON CHIPPEWA RIVER, LAT 44°56'18", LONG 91°20'27", IN NW 1/4 SEC.3, T.28 N., R.8 W., CHIPPEWA COUNTY, 2.0 MI (3.2 KM) EAST OF CHIPPEWA FALLS, WIS., CITY LIMITS, COMPLETED IN 1917, HAS A USABLE CAPACITY OF 3,547,000,000 FT³ (100,500,000 M³). DRAINAGE AREA, 5,548 MI² (14,369 KM²). DATUM OF GAGE IS AT MEAN SEA LEVEL (NORTHERN STATES POWER CO. BENCH MARK).

MONTH-END CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

	MOOSE LAKE	LAKE CHIPPEWA	REST LAKE	FLAMBEAU FLOWAGE	LAKE WISSOTA
SEPT. 30.....	407	8,702	918	2,860	3,817
OCT. 31.....	150	8,736	392	3,474	3,898
NOV. 30.....	100	9,892	350	5,160	3,852
DEC. 31.....	15	8,435	350	5,160	3,871
JAN. 31.....	15	6,405	350	4,100	2,828
FEB. 29.....	35	4,864	350	3,042	559
MAR. 31.....	150	5,104	378	2,990	4,316
APR. 30.....	400	9,640	733	5,000	3,884
MAY 31.....	400	9,352	918	5,412	3,964
JUNE 30.....	400	9,532	955	4,872	3,924
JULY 31.....	386	8,736	867	3,620	3,868
AUG. 31.....	365	8,237	800	2,586	3,924
SEPT. 30.....	351	8,006	750	1,956	3,924

MISSISSIPPI RIVER MAIN STEM

05378500 MISSISSIPPI RIVER AT WINONA, MN
(NATIONAL STREAM-QUALITY ACCOUNTING NETWORK STATION)

LOCATION.--LAT 44°03'20", LONG 91°38'15", IN SEC.23, T.107 N., R.7 W., WINONA COUNTY, HYDROLOGIC UNIT 07040003, ON RIGHT BANK AT WINONA PUMPING STATION IN WINONA, 9.5 MI (15.3 KM) UPSTREAM FROM TREMPLEAU RIVER, AND AT MILE 725.7 (1,167.7 KM) UPSTREAM FROM THE OHIO RIVER.

DRAINAGE AREA.--59,200 MI² (153,300 KM²), APPROXIMATELY.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--JUNE 1928 TO CURRENT YEAR. GAGE-HEIGHT RECORDS COLLECTED IN THIS VICINITY SINCE 1878 ARE CONTAINED IN REPORTS OF MISSISSIPPI RIVER COMMISSION.

REVISED RECORD.--WSP 700: ORAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 639.64 FT (194.962 M) ABOVE MEAN SEA LEVEL. JUNE 10, 1928, TO APR. 15, 1931, NONRECORDING GAGE AT SITE 800 FT (244 M) UPSTREAM. PRIOR TO OCT. 1, 1929, AT DATUM 0.20 FT (0.06 M) HIGHER AND OCT. 1, 1929, TO APR. 15, 1931, AT DATUM 0.12 FT (0.04 M) LOWER. APR. 16, 1931, TO NOV. 12, 1934, NONRECORDING GAGE AT PRESENT SITE AND DATUM. SINCE MAR. 31, 1937, AUXILIARY WATER-STAGE RECORDER 2.7 MI (4.3 KM) UPSTREAM AT TAILWATER OF NAVIGATION DAM 5A.

REMARKS.--RECORDS GOOD. SOME REGULATION BY RESERVOIRS, NAVIGATION DAMS, AND POWERPLANTS AT LOW AND MEDIUM STAGES. FLOOD FLOW NOT MATERIALLY AFFECTED BY ARTIFICIAL STORAGE.

AVERAGE DISCHARGE.--48 YEARS, 26,230 FT³/S (743 M³/S), 6.02 IN/YR (153 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 268,000 FT³/S (7,590 M³/S) APR. 19, 1965, GAGE HEIGHT, 20.77 FT (6.331 M), FROM FLOODMARK; MINIMUM, 2,250 FT³/S (63.7 M³/S) DEC. 29, 1933, GAGE HEIGHT, -1.18 FT (-0.360 M); MINIMUM GAGE HEIGHT, -3.38 FT (-1.030 M) AUG. 31, 1934.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--FLOOD OF JUNE 18, 1880, REACHED AN ELEVATION OF 657.14 FT (200.296 M), DISCHARGE, 172,000 FT³/S (4,870 M³/S), FROM INFORMATION BY CORPS OF ENGINEERS.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 120,000 FT³/S (3,400 M³/S) APR. 5, GAGE HEIGHT, 13.21 FT (4.026 M); MINIMUM DAILY, 6,100 FT³/S (173 M³/S) SEPT. 28; MINIMUM GAGE HEIGHT, 4.45 FT (1.356 M) DEC. 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19200	20700	26700	21100	18700	28300	74700	42700	15200	13700	11400	7130
2	17800	20900	25800	21000	18600	28400	87200	37900	16700	13400	9990	8090
3	17400	20800	26000	19600	17900	28500	104000	35400	17600	13300	7880	7140
4	18000	19600	27200	18400	17500	28600	116000	30400	18100	12500	7820	7220
5	17400	19000	28900	17900	17500	29200	119000	28500	17000	12500	8310	8910
6	17500	19000	30800	17400	17400	29800	119000	29500	17100	11800	9700	8510
7	16300	19000	30800	17300	17300	27300	115000	30100	14900	9760	9700	8100
8	16100	18400	31300	16400	17300	26300	109000	28600	11100	9980	9250	7800
9	15700	18900	30800	15400	17300	25700	102000	25900	11000	10300	9800	7340
10	15100	23400	29400	15100	17400	25200	96000	25300	11500	10100	9390	8300
11	16000	23600	26000	15300	17500	25900	91200	25000	11800	10200	8160	7930
12	16400	24500	26300	15400	17700	29200	82900	24600	13900	11400	7950	8500
13	15400	33000	25400	15900	18900	38500	77300	23300	12800	11400	8280	8470
14	15400	34500	25100	16500	19800	44200	72900	23000	12800	10700	8670	7940
15	14800	34300	23100	16400	21800	38000	69400	22500	12500	11600	8980	8510
16	15400	35100	21300	16800	26000	33300	64600	23200	11600	11900	9680	7590
17	15400	33700	13300	17000	26900	31600	60400	22500	13100	11500	9810	7780
18	15700	32400	10400	16900	28200	29500	57400	21000	12100	10600	9710	7660
19	15800	30800	10400	16900	27600	29700	55500	18700	14000	10300	8820	9510
20	15300	29100	15300	17000	25000	33700	55200	16700	16800	8420	9430	10800
21	15200	28100	19800	16900	23800	34800	54500	16100	19400	9690	9570	9360
22	14900	30100	21700	16900	23900	32800	53800	15600	17900	9240	8360	9300
23	15600	31000	22600	16900	24100	39700	52300	15800	16800	9270	9040	7380
24	16800	32200	21800	16900	24300	40900	50900	16100	15800	10100	9020	6640
25	19200	32200	21600	17000	24600	43400	51100	15100	14600	10400	8370	7610
26	20600	30000	21500	17400	24300	44600	51900	13600	13200	9820	8340	7720
27	20500	28900	21500	17800	25500	48100	52400	13500	11300	9880	7470	7420
28	20200	26400	21400	17800	26300	49000	51100	12400	11300	12300	7100	6100
29	20500	23200	20900	17700	27700	51300	48100	12900	13100	13000	7520	6740
30	21400	26000	21000	18500	---	58300	45400	13100	14700	14100	8200	6650
31	20200	---	21000	18700	---	65100	---	17700	---	12300	7120	---
TOTAL	531200	798800	719100	536200	630800	1118900	2240200	696700	429700	345460	272840	237630
MEAN	17140	26630	23200	17300	21750	36090	74670	22470	14320	11140	8801	7921
MAX	21400	35100	31300	21100	28200	65100	119000	42700	19400	14100	11400	10800
MIN	14800	18400	10400	15100	17300	25200	45400	12400	11000	8420	7100	6100
CFSM	.29	.45	.39	.29	.37	.61	1.26	.38	.24	.19	.15	.13
IN.	.33	.50	.45	.34	.40	.70	1.41	.44	.27	.22	.17	.15
CAL YR 1975 TOTAL	12777700		MEAN 35010	MAX 165000	MIN 10400	CFSM .59	IN 8.03					
WTR YR 1976 TOTAL	8557530		MEAN 23380	MAX 119000	MIN 6100	CFSM .39	IN 5.38					

MISSISSIPPI RIVER MAIN STEM

05378500 MISSISSIPPI RIVER AT WINONA, MN--CONTINUED
(NATIONAL STREAM-QUALITY ACCOUNTING NETWORK STATION)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEAR 1964 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: OCTOBER 1975 TO SEPTEMBER 1976.

WATER TEMPERATURES: OCTOBER 1975 TO SEPTEMBER 1976.

SUSPENDED-SEDIMENT DISCHARGE: SEPTEMBER 1975 TO SEPTEMBER 1976.

REMARKS.--DURING WINTER PERIOD SUSPENDED SEDIMENT SAMPLES WERE COLLECTED WEEKLY AND DAILY SEDIMENT LOADS WERE ESTIMATED ON THE BASIS OF WATER RECORDS AND WEEKLY SEDIMENT SAMPLES. WATER TEMPERATURES AND SPECIFIC CONDUCTANCE WAS OBSERVED ONCE DAILY FOR MOST OF THE OPEN-WATER PERIOD AND WEEKLY FOR THE WINTER PERIOD.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: MAXIMUM, 380 MICROMHOS MARCH 7, 8, SEPT. 19, 28-30; MINIMUM, 205 MICROMHOS APRIL 25, 26.

WATER TEMPERATURES: MAXIMUM, 29.0°C JULY 10; MINIMUM 0.0°C ON MANY DAYS DURING WINTER PERIOD.

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 167 MG/L APRIL 4; MINIMUM DAILY MEAN, 7 MG/L JAN. 19.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 52,300 TONS (47,400 TONNES) APRIL 4; MINIMUM DAILY, 319 TONS (289 TONNES) JAN. 19.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT 22...	0930	14100	306	7.7	10.0	10.5	30	9	15.0	139	290	52
NOV 19...	1100	30500	280	8.1	13.0	8.0	25	--	10.6	91	310	140
NOV 21...	1100	--	--	--	--	--	--	--	--	--	--	--
DEC 17...	1000	16700	330	7.8	-19.0	.0	40	--	--	--	56	250
JAN 20...	1200	17000	350	7.7	-12.0	.0	35	--	13.0	92	140	260
FEB 25...	1700	24500	317	7.7	10.0	1.0	30	5	10.6	77	824	812
APR 07...	1600	116000	236	8.2	15.0	9.0	40	9	11.4	100	819	853
MAY 13...	0900	21700	260	9.2	9.0	15.5	50	10	12.0	122	32	--
JUN 10...	1601	10600	315	8.7	27.0	24.5	23	--	9.6	117	60	150
JUL 27...	1530	8340	345	8.5	32.0	27.0	25	10	--	--	--	4
AUG 30...	1700	5200	360	8.9	28.0	26.0	17	9	--	--	300	600

DATE	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CAC03 (MG/L)	CARRON DIOXIDE (CO2) (MG/L)
OCT 22...	150	6	37	14	8.8	11	.3	2.3	176	0	144	5.6
NOV 19...	130	9	33	12	8.3	12	.3	2.1	150	0	123	1.9
NOV 21...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 17...	140	13	35	12	8.8	12	.3	2.3	143	4	124	3.8
JAN 20...	150	10	38	14	10	12	.4	2.2	174	0	143	5.6
FEB 25...	160	23	42	13	9.3	11	.3	2.3	165	0	135	5.3
APR 07...	110	19	28	9.4	5.1	9	.2	2.5	109	0	89	1.1
MAY 13...	120	14	29	13	6.6	11	.3	2.0	118	4	103	.1
JUN 10...	140	18	35	13	8.3	11	.3	2.0	150	0	123	.5
JUL 27...	140	19	34	14	9.3	12	.3	1.9	151	0	124	.8
AUG 30...	150	20	37	15	11	13	.4	2.2	164	0	135	.3

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

MISSISSIPPI RIVER MAIN STEM
05378500 MISSISSIPPI RIVER AT WINONA, MN--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	VOLATILE FILTRABLE RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAML NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)
OCT , 1975												
22...	17	12	.1	.9	199	179	.27	7580	81	.00	2.1	2.1
NOV												
19...	12	7.6	.1	6.2	169	155	.23	13900	48	.42	2.7	3.1
21...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
17...	20	11	.2	9.0	191	173	.26	8610	80	.67	1.3	2.0
JAN , 1976												
20...	19	12	.2	12	226	193	.31	10400	28	.88	1.3	2.2
FEB												
25...	17	11	.2	12	196	188	.27	13000	94	.88	1.3	2.2
APR												
07...	20	6.2	.1	10	147	135	.20	46000	69	.99	1.2	2.2
MAY												
13...	19	7.3	.1	.7	151	138	.21	8850	64	.01	1.5	1.5
JUN												
10...	20	11	.2	1.0	183	165	.25	5240	33	--	--	--
JUL												
27...	17	11	.2	4.3	182	166	.25	4100	107	.01	.83	.84
AUG												
30...	19	15	.1	11	180	191	.24	2530	38	.01	1.0	1.0

DATE	TOTAL NITROGEN (NO ₃) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	LENGTH OF EXPOSURE (DAYS)	PERI-PHYTON ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCORRECTED PERI-PHYTON CHLORO-PHYLL B MG/SQ M	UNCORRECTED PERI-PHYTON CHLORO-PHYLL A MG/SQ M	SUS. SED. FALL DIAM. % FINER THAN .062 MM
OCT , 1975												
22...	9.3	.14	50	560	110	--	--	--	--	--	--	90
NOV												
19...	14	.12	50	610	90	12	--	--	--	--	--	68
21...	--	--	--	--	--	--	30	16.0	19.0	.40	46	--
DEC												
17...	8.7	.14	40	420	80	--	--	--	--	--	--	--
JAN , 1976												
20...	9.7	.12	60	250	110	--	--	--	--	--	--	90
FEB												
25...	9.7	.16	50	470	150	--	--	--	--	--	--	88
APR												
07...	9.7	.14	50	940	100	7.1	42	93.0	94.0	.00	110	57
MAY												
13...	6.7	.10	50	600	120	--	--	--	--	--	--	84
JUN												
10...	--	.15	50	470	150	--	--	--	--	--	--	89
JUL												
27...	3.7	.27	50	310	150	--	--	--	--	--	--	--
AUG												
30...	4.5	.18	60	290	130	--	--	--	--	--	--	--

05378500 MISSISSIPPI RIVER AT WINONA, MN--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TOTAL ARSENIC (UG/L)	SUS-PENDEED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	SUS-PENDEED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDEED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)
NOV , 1975												
19...	1100	30500	1	0	1	50	<10	<10	0	110	110	0
APR , 1976												
07...	1600	116000	0	0	0	50	<10	<10	0	0	0	0
JUN												
10...	1601	10600	0	0	0	50	0	0	0	10	0	<10

DATE	TOTAL COBALT (CO) (UG/L)	SUS-PENDEED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS-PENDEED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS-PENDEED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)
NOV , 1975												
19...	<50	<49	1	<10	<6	4	610	60	<100	<97	3	90
APR , 1976												
07...	<50	<50	0	40	38	2	940	150	100	82	18	100
JUN												
10...	0	0	0	10	10	0	470	10	12	10	2	150

DATE	SUS-PENDEED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDEED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDEED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDEED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV , 1975											
19...	60	30	<.5	.0	<.5	0	0	0	20	10	10
APR , 1976											
07...	80	20	<.5	.0	<.5	0	0	0	10	0	10
JUN											
10...	150	0	<.5	.0	<.5	0	0	0	10	0	10

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
APR , 1976											
15...	0900	70000	0	1	4	29	73	98	92	96	100

MISSISSIPPI RIVER MAIN STEM
05378500 MISSISSIPPI RIVER AT WINONA, MN--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent composition
Oct. 22, 1975	0930	CHLOROPHYTA		
		Chlorophyceae		
		<i>Actinastrum</i>	200	1
		<i>Staurastrum</i>		0
		<i>Tetrastrum</i>	1,600	4
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Gomphonema</i>	200	1
		<i>Melosira</i>	7,600	19
		<i>Navicula</i>		0
		<i>Neidium</i>		0
		<i>Nitzschia</i>	610	2
		<i>Stephanodiscus</i>	18,000	45
		CYANOPHYTA		
		Myxophyceae		
<i>Anacystis</i>	1,800	5		
<i>Aphanizomenon</i>	3,100	8		
<i>Oscillatoria</i>	7,600	19		
TOTAL		41,000		
Nov. 19, 1975	1100	CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Asterionella</i>		0
		<i>Cyclotella</i>	1,300	21
		<i>Gomphonema</i>	160	3
		<i>Melosira</i>	3,300	54
		<i>Navicula</i>	320	5
		<i>Nitzschia</i>	320	5
		<i>Stephanodiscus</i>	480	8
		<i>Suriella</i>	160	3
		CYANOPHYTA		
		Myxophyceae		
		<i>Aphanizomenon</i>		0
		EUGLENOPHYTA		
		Cryptophyceae		
<i>Cryptomonas</i>	160	3		
TOTAL		6,200		
Dec. 17, 1975	1000	CHLOROPHYTA		
		Chlorophyceae		
		<i>Ankistrodesmus</i>	200	4
		<i>Chlamydomonas</i>		0
		<i>Dictyosphaerium</i>		0
		<i>Phacotus</i>		0
		<i>Scenedesmus</i>		0
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Asterionella</i>	540	11
		<i>Cyclotella</i>	3,600	72
		<i>Fragilaria</i>		0
		<i>Melosira</i>	67	1
		<i>Navicula</i>	67	1
		<i>Nitzschia</i>		0
<i>Synedra</i>		0		
CYANOPHYTA				
Myxophyceae				
<i>Anacystis</i>	540	11		
<i>Oscillatoria</i>		0		
TOTAL		5,000		
Jan. 20, 1976		CHLOROPHYTA		
		Chlorophyceae		
		<i>Chlamydomonas</i>	16	2
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Asterionella</i>	65	9
		<i>Cyclotella</i>	200	27
		<i>Nitzschia</i>	49	7
		Chrysophyceae		
		<i>Ochromonas</i>	81	11
CYANOPHYTA				
Myxophyceae				
<i>Oscillatoria</i>	330	44		
TOTAL		730		

05378500 MISSISSIPPI RIVER AT WINONA, MN--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent composition
Feb. 25, 1976	1700	CHLOROPHYTA		
		Chlorophyceae		
		Ankistrodesmus	19	4
		Chlorogonium		0
		CHRYSOPHYTA		
		Bacillariophyceae		
		Asterionella		0
		Cyclotella	210	42
		Melosira	38	8
		Navicula	56	12
		Stephanodiscus		0
		Synedra	19	4
		CYANOPHYTA		
		Myxophyceae		
		Oscillatoria	150	31
		TOTAL	490	
		Apr. 7, 1976	1600	CHLOROPHYTA
Chlorophyceae				
Ankistrodesmus	380			5
Kirchneriella	95			1
Scenedesmus				0
CHRYSOPHYTA				
Bacillariophyceae				
Amphora				0
Asterionella				0
Cyclotella	6,800			87
Fragilaria	290			4
Gyrosigma				0
Hantzschia				0
Melosira				0
Meridion				0
Navicula	95			1
Nitzschia	190			2
Surirella				0
Synedra				0
CYANOPHYTA				
Myxophyceae				
Oscillatoria				0
EUGLENOPHYTA				
Euglenophyceae				
Euglena		0		
TOTAL	7,800			
May 13, 1976	0900	CHLOROPHYTA		
		Chlorophyceae		
		Actinastrum	780	1
		Ankistrodesmus	2,300	4
		Kirchneriella	3,100	6
		Micractinium	3,100	6
		Scenedesmus	2,300	4
		CHRYSOPHYTA		
		Bacillariophyceae		
		Cyclotella	2,000	4
		Melosira	23,000	42
		Navicula	390	1
		Nitzschia	1,200	2
		Stephanodiscus	3,500	6
		Synedra	780	1
		CYANOPHYTA		
		Myxophyceae		
		Coccochloris	12,000	23
		TOTAL	55,000	

MISSISSIPPI RIVER MAIN STEM

05378500 MISSISSIPPI RIVER AT WINONA, MN--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	ORGANISM	Count (cells/ml)	Percent composition
June 10, 1976	1600	CHLOROPHYTA		
		Chlorophyceae		
		<i>Actinastrum</i>	670	1
		<i>Ankistrodesmus</i>	340	1
		<i>Crucigenia</i>	670	1
		<i>Dictyosphaerium</i>		0
		<i>Micractinium</i>	4,200	8
		<i>Oocystis</i>	1,300	3
		<i>Pediastrum</i>		0
		<i>Polydriopsis</i>		0
		<i>Scenedesmus</i>	670	1
		<i>Staurastrum</i>		0
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Amphiproora</i>		0
		<i>Asterionella</i>		0
		<i>Cyclotella</i>	15,000	28
		<i>Fragilaria</i>		0
		<i>Melosira</i>	9,400	18
		<i>Nitzschia</i>		0
		<i>Stephanodiscus</i>		0
		<i>Synedra</i>	340	1
		CYANOPHYTA		
		Myxophyceae		
		<i>Agmenellum</i>	11,000	20
		<i>Anabaena</i>	1,200	2
		<i>Anacystis</i>	5,200	10
<i>Oscillatoria</i>	2,900	5		
EUGLENOPHYTA				
Euglenophyceae				
<i>Trachelomonas</i>		0		
PYRRHOPHYTA				
Dinophyceae				
<i>Glenodinium</i>		0		
TOTAL		53,000		
July 27, 1976	1530	CHLOROPHYTA		
		Chlorophyceae		
		<i>Ankistrodesmus</i>		0
		<i>Chodatella</i>		0
		<i>Coelastrum</i>	780	1
		<i>Dictyosphaerium</i>	3,100	3
		<i>Gloeoactinium</i>	650	1
		<i>Pediastrum</i>	1,200	1
		<i>Scenedesmus</i>	780	1
		<i>Tetraedron</i>		0
		<i>Tetrastrum</i>		0
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Cyclotella</i>	1,800	2
		<i>Melosira</i>	5,300	5
		<i>Nitzschia</i>		0
		Chrysophyceae		
		<i>Ochromonas</i>		0
		CYANOPHYTA		
		Myxophyceae		
		<i>Agmenellum</i>	3,400	3
		<i>Anabaena</i>	4,400	4
		<i>Anacystis</i>	19,000	18
		<i>Anacystis incerta</i>	9,000	8
		<i>Aphanizomenon</i>	4,500	4
		<i>Oscillatoria</i>	52,000	48
		EUGLENOPHYTA		
Cryptophyceae				
<i>Chroomonas</i>		0		
TOTAL		110,000		
Aug. 30, 1976	1700	CHLOROPHYTA		
		Chlorophyceae		
		<i>Actinastrum</i>	2,400	1
		<i>Ankistrodesmus</i>		0
		<i>Dictyosphaerium</i>	2,400	1
		<i>Geminella</i>	12,000	4
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Cyclotella</i>		0
		<i>Melosira</i>		0
		<i>Nitzschia</i>		0
		CYANOPHYTA		
		Myxophyceae		
		<i>Agmenellum</i>	8,200	2
		<i>Anabaena</i>	8,500	3
		<i>Anacystis</i>	11,000	3
		<i>Aphanizomenon</i>	22,000	7
<i>Cylindrospermum</i>	100,000	31		
<i>Oscillatoria</i>	160,000	48		
TOTAL		330,000		

05378500 MISSISSIPPI RIVER AT WINONA, MN--CONTINUED

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	295	299	282	---	---	---	288	240	280	310	300	315
2	307	302	280	---	---	---	290	260	285	260	320	335
3	307	302	261	---	306	360	290	270	295	310	320	350
4	307	304	243	---	---	350	302	360	285	320	320	370
5	307	310	217	---	---	360	325	280	280	330	330	300
6	307	312	222	300	---	340	350	265	280	330	330	295
7	303	324	---	---	---	380	285	240	280	320	330	290
8	303	324	236	---	---	380	300	260	280	330	335	350
9	303	318	222	---	---	310	300	245	290	340	335	360
10	307	312	254	---	---	300	227	240	300	340	340	340
11	315	310	265	---	---	280	220	250	320	340	340	350
12	315	307	269	317	306	290	220	260	320	325	330	300
13	307	312	269	---	---	310	215	267	305	330	320	300
14	307	243	269	---	---	300	239	260	305	300	320	370
15	307	224	324	---	---	330	215	255	300	300	315	320
16	303	233	315	---	---	355	215	255	300	320	330	300
17	299	246	310	---	---	360	210	250	310	320	340	300
18	307	273	311	---	---	310	222	245	320	325	330	310
19	307	271	284	306	---	300	218	245	320	---	325	380
20	299	248	---	332	306	325	212	240	320	320	325	320
21	299	265	---	---	---	320	215	240	320	315	335	330
22	295	278	---	---	---	275	215	240	320	320	335	330
23	297	273	280	---	---	260	210	245	320	320	335	300
24	304	265	---	---	---	250	210	245	320	320	335	370
25	---	257	---	306	289	290	205	240	320	310	335	310
26	302	257	---	---	---	285	205	250	320	300	335	320
27	294	240	---	---	---	295	210	270	280	320	340	370
28	297	236	---	---	---	292	220	270	330	305	345	380
29	302	269	---	---	---	295	220	270	325	300	345	380
30	297	265	284	---	---	290	240	275	330	315	340	380
31	302	---	---	---	---	305	---	280	---	320	330	---
MONTH	303	279	---	---	---	314	243	258	305	317	330	334

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	9.5	---	---	---	---	5.0	13.0	19.5	23.0	24.5	21.0
2	---	9.5	0.0	---	---	---	6.0	13.0	19.5	23.5	24.5	20.5
3	---	11.0	0.0	---	0.0	0.0	6.5	10.0	20.5	24.0	24.0	21.0
4	---	10.5	0.0	---	---	0.0	7.0	13.0	21.5	24.5	23.0	20.5
5	---	11.0	0.0	---	---	0.0	7.5	12.5	21.0	25.0	23.0	21.0
6	---	11.0	0.0	0.0	---	0.0	7.5	13.0	21.5	25.0	22.0	21.0
7	---	12.0	0.0	---	---	0.0	8.0	12.5	23.5	25.5	22.0	20.5
8	---	11.5	0.0	---	---	0.0	7.5	12.5	23.5	26.0	22.0	21.0
9	---	11.0	0.0	---	---	0.0	8.0	13.0	24.0	28.0	22.0	20.0
10	---	10.0	0.0	---	---	0.0	10.0	14.5	24.0	29.0	23.0	19.5
11	---	9.0	0.0	---	---	0.0	9.5	15.0	25.0	27.0	23.5	19.5
12	---	7.0	0.0	0.0	1.0	1.0	8.5	15.0	25.0	26.0	23.5	21.5
13	---	5.5	0.0	---	---	1.0	10.0	15.0	25.0	26.5	24.0	20.0
14	---	5.0	0.0	---	---	2.0	11.0	16.0	25.0	26.5	23.0	19.5
15	---	5.5	0.0	---	---	2.0	11.5	15.5	23.0	25.5	23.5	18.5
16	---	7.5	0.0	---	---	2.0	13.0	15.5	22.0	24.0	22.0	18.0
17	---	7.5	0.0	---	---	3.0	13.0	15.0	21.5	24.0	21.5	18.0
18	---	8.0	0.0	---	---	3.0	13.0	16.0	20.5	25.0	23.0	17.0
19	---	8.0	0.0	0.0	---	3.0	13.0	16.5	19.5	---	24.0	18.0
20	---	7.0	---	0.0	2.0	6.0	12.0	18.5	21.0	24.5	24.0	18.0
21	---	6.0	---	---	---	3.0	11.5	19.0	21.5	25.0	24.0	17.0
22	10.5	4.5	---	---	---	4.0	11.0	19.5	21.5	25.5	24.5	16.0
23	13.0	4.5	0.0	---	---	4.0	11.0	19.0	22.0	25.5	24.0	16.0
24	13.0	3.5	---	---	---	5.0	10.0	19.5	22.0	25.5	24.0	14.5
25	---	2.5	---	0.0	1.5	5.0	11.0	18.5	22.0	26.0	24.5	15.0
26	11.5	2.0	---	---	---	6.0	13.0	19.5	22.0	26.5	24.0	16.5
27	11.0	3.0	---	---	---	6.0	12.0	19.5	23.0	27.0	25.0	15.0
28	13.0	3.0	---	---	---	6.0	13.0	19.5	23.0	25.5	23.5	14.5
29	10.0	3.5	---	---	---	6.0	13.0	19.5	23.0	25.5	22.0	14.5
30	10.0	2.5	0.0	---	---	6.0	13.0	19.0	22.0	25.5	23.0	15.0
31	9.5	---	---	---	---	4.5	---	19.0	---	25.5	21.5	---
MONTH	---	7.0	---	---	---	2.5	10.0	16.0	22.5	25.5	23.5	18.5

05379400 TREMPEALEAU RIVER AT ARCADIA, WI

LOCATION.--LAT 44°15'15", LONG 91°30'25", IN SW 1/4 SEC.32, T.21 N., R.9 W., TREMPEALEAU COUNTY, HYDROLOGIC UNIT 07040005, NEAR RIGHT BANK ON DOWNSTREAM SIDE OF BRIDGE ON STATE HIGHWAY 93 AND 95 IN ARCADIA, 0.5 MI (0.8 KM) DOWNSTREAM FROM TURTON CREEK.

DRAINAGE AREA.--552 MI² (1,430 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--JULY 1960 TO CURRENT YEAR.

REVISED RECORDS.--WRD WI-70-1: 1968-69.

GAGE.--NONRECORDING GAGE AND CREST-STAGE GAGE. DATUM OF GAGE IS 719.61 FT (219.337 M) ABOVE MEAN SEA LEVEL.

REMARKS.--RECORDS ARE FAIR.

AVERAGE DISCHARGE.--16 YEARS, 396 FT³/S (11.21 M³/S), 9.74 IN/YR (247 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 15,900 FT³/S (450 M³/S) AUG. 23, 1975, GAGE HEIGHT, 8.64 FT (2.633 M), FROM RATING CURVE EXTENDED ABOVE 4,300 FT³/S (122 M³/S) ON BASIS OF CONTRACTED OPENING MEASUREMENT OF PEAK FLOW; MINIMUM DISCHARGE OBSERVED, 110 FT³/S (3.12 M³/S) AUG. 8, 9, 19, 1964.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 5,310 FT³/S (150 M³/S) MAR. 12, GAGE HEIGHT, 6.67 FT (2.033 M); MINIMUM DAILY, 201 FT³/S (5.69 M³/S) AUG. 29.

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 2 TO FEB. 20.)

OCT. 1 TO MAR. 30

MAR. 31 TO SEPT. 30

1.3	200	4.0	1,500	1.4	188	3.0	850
2.0	480	5.0	2,390	2.0	400	4.0	1,500
3.0	920	6.0	3,780				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	400	244	695	300	270	600	1120	508	412	295	317	228
2	392	236	600	300	260	456	826	504	389	292	288	231
3	380	228	520	280	260	416	636	492	358	281	271	231
4	316	236	480	250	260	384	564	452	343	281	261	231
5	324	224	450	280	260	384	516	460	335	257	295	218
6	320	216	430	290	260	364	492	448	328	247	292	218
7	332	224	410	290	270	376	484	436	328	310	281	218
8	312	232	390	290	280	352	464	428	320	288	261	218
9	316	308	370	290	300	356	456	420	313	274	254	214
10	304	1490	350	290	320	340	448	408	317	271	247	218
11	248	990	340	290	340	368	464	389	324	268	247	211
12	296	844	330	290	370	2100	472	370	317	264	241	208
13	288	664	330	280	700	3380	464	392	332	238	241	208
14	288	496	500	280	600	1940	444	400	332	241	238	221
15	280	436	660	280	1100	1370	468	404	317	251	234	231
16	284	400	540	280	2200	920	468	556	317	244	231	228
17	276	388	430	280	1800	636	464	1080	317	264	231	224
18	268	368	390	280	1500	623	730	934	328	264	238	218
19	260	360	360	280	1200	798	544	922	330	264	231	231
20	268	360	340	280	1000	888	958	548	335	244	221	238
21	268	552	340	280	785	808	765	448	320	285	211	231
22	264	582	330	280	569	668	838	420	306	285	218	224
23	264	492	330	280	496	552	838	389	299	271	214	231
24	288	440	320	280	520	544	802	392	299	271	214	218
25	320	412	320	270	605	569	1070	385	302	257	214	221
26	292	400	320	270	659	582	928	377	302	251	221	231
27	280	400	320	270	718	623	745	366	302	251	214	234
28	264	392	310	270	664	610	604	366	292	347	204	228
29	252	376	310	270	659	682	544	370	310	347	201	228
30	236	780	310	270	---	1110	520	389	306	328	208	218
31	232	---	300	270	---	1480	---	408	---	366	221	---
TOTAL	9112	13770	12425	8690	19225	25279	19136	14861	9730	8597	7460	6707
MEAN	294	459	401	288	663	815	638	479	324	277	241	224
MAX	400	1490	695	300	2200	3380	1120	1080	412	366	317	238
MIN	232	216	300	250	260	340	444	366	292	238	201	208
CFSM	.53	.83	.73	.51	1.20	1.48	1.16	.87	.59	.50	.44	.41
IN.	.61	.93	.84	.59	1.30	1.70	1.29	1.00	.66	.58	.50	.45
CAL YR 1975	TOTAL	206807	MEAN 567	MAX 7830	MIN 216	CFSM 1.03	IN 13.94					
WTR YR 1976	TOTAL	154992	MEAN 423	MAX 3380	MIN 201	CFSM .77	IN 10.45					

CHIPPEWA RIVER BASIN
05379400 TREMPLEAU RIVER AT ARCADIA, WI--CONTINUED
WATER-QUALITY RECORDS

PERIOD OF RECORD---WATER YEARS 1960 TO CURRENT YEAR.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 21, 1975	1415	4.0	696	210	June 29, 1976	1455	20.5	317	220
Jan. 16, 1976	1630	0.0	277	260	Aug. 10, 1976	1735	26.0	246	220
Feb. 27, 1976	1455	4.5	714	-	Sept. 16, 1976	1400	17.0	229	650
May 12, 1976	1550	17.0	378	245					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT. 1975						
07...	1120	--	354	35	33	--
NOV						
21...	1345	4.0	695	168	315	--
FEB. 1976						
27...	1530	--	715	160	309	56
MAR						
24...	1540	--	530	108	155	--
MAY						
12...	1550	17.0	378	55	56	--
JUN						
29...	1500	20.5	317	83	71	--
AUG						
10...	1725	26.0	246	73	48	--
SEP						
16...	1500	17.0	229	21	13	--

TREMPEALEAU RIVER BASIN

247

05379500 TREMPEALEAU RIVER AT DODGE, WI

LOCATION.--LAT 44°07'55", LONG 91°33'14", IN SE 1/4 SEC.10, T.19 N., R.10 W., TREMPEALEAU COUNTY, HYDROLOGIC 07040005, NEAR LEFT BANK ON DOWNSTREAM SIDE OF HIGHWAY BRIDGE IN DODGE, 9.0 MI (14.5 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--643 MI² (1,665 KM²).

PERIOD OF RECORD.--DECEMBER 1913 TO SEPTEMBER 1919, APRIL 1934 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1238: DRAINAGE AREA. WSP 1388: 1919(M). WSP 1438: 1914, 1915-18(M), 1934-44(M), 1946-49(M).

GAGE.--NONRECORDING GAGE AND CREST-STAGE GAGE. DATUM OF GAGE IS 661.42 FT (201.601 M) ABOVE MEAN SEA LEVEL. PRIOR TO OCT. 1, 1966, DATUM 2.00 FT (0.610 M) HIGHER.

REMARKS.--RECORDS ARE FAIR.

AVERAGE DISCHARGE.--47 YEARS (1914-19, 1934-76), 412 FT³/S (11.67 M³/S), 8.70 IN/YR (221 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 17,400 FT³/S (493 M³/S) APR. 4, 1956, GAGE HEIGHT, 10.35 FT (3.155 M); MINIMUM DAILY, 98 FT³/S (2.78 M³/S) JAN. 10, 1938.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 3,030 FT³/S (85.8 M³/S) MAR. 14, GAGE HEIGHT, 9.37 FT (2.856 M); MINIMUM DAILY, 296 FT³/S (8.40 M³/S) SEPT. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	436	351	1010	360	320	656	1420	563	438	347	353	237
2	426	351	713	360	320	512	1330	578	419	342	347	234
3	419	351	640	340	320	478	1110	560	395	319	344	231
4	402	347	600	310	320	450	968	536	383	289	266	231
5	392	344	560	320	320	421	677	521	362	266	302	228
6	385	340	540	330	320	400	620	515	355	257	296	226
7	387	328	518	340	320	390	596	486	344	271	291	233
8	383	344	483	350	330	380	563	503	321	296	289	231
9	375	340	451	350	350	380	536	462	315	295	287	236
10	364	1010	431	350	370	404	509	441	325	273	280	233
11	358	1230	424	340	390	475	509	438	319	264	277	231
12	349	1190	419	340	450	1150	512	416	315	260	273	231
13	366	870	409	340	600	1940	503	416	331	255	271	233
14	364	629	506	340	800	2670	489	449	351	255	268	237
15	364	536	812	330	700	2020	475	436	342	250	257	239
16	360	492	947	330	1300	1840	512	551	336	275	253	241
17	360	469	560	330	2000	1200	492	844	331	259	252	242
18	360	451	480	330	1500	745	686	972	333	259	259	245
19	355	434	450	330	1300	662	964	947	329	255	255	244
20	355	444	430	330	1100	787	1010	884	358	327	253	269
21	355	771	420	330	1000	902	961	860	342	286	252	260
22	355	668	420	330	800	888	870	812	333	273	244	252
23	358	617	410	330	740	819	796	771	329	266	242	250
24	360	518	410	330	760	605	894	539	327	259	239	244
25	397	497	400	330	800	590	1010	416	319	253	236	239
26	402	449	400	330	900	569	1070	409	317	253	242	245
27	380	451	390	330	758	677	891	400	311	252	237	250
28	366	599	390	330	812	668	860	378	309	340	234	252
29	355	563	380	320	716	695	692	409	311	399	229	249
30	351	822	380	320	---	1020	626	387	349	351	233	249
31	349	---	370	320	---	1280	---	464	---	402	231	---
TOTAL	11588	16806	15753	10350	20716	26673	23151	17372	10249	8948	8292	7222
MEAN	374	560	508	334	714	860	772	560	342	289	267	241
MAX	436	1230	1010	360	2000	2670	1420	972	438	402	353	269
MIN	349	328	370	310	320	380	475	378	309	250	229	226
CFSM	.58	.87	.79	.52	1.11	1.34	1.20	.87	.53	.45	.42	.37
IN.	.67	.97	.91	.60	1.20	1.54	1.34	1.01	.59	.52	.48	.42
CAL YR 1975	TOTAL	226991	MEAN 622	MAX 7260	MIN 237	CFSM .97	IN 13.13					
WTR YR 1976	TOTAL	177120	MEAN 484	MAX 2670	MIN 226	CFSM .75	IN 10.25					

BLACK RIVER BASIN

05381000 BLACK RIVER AT NEILLSVILLE, WI

LOCATION.--LAT 44°33'35", LONG 90°36'54", IN SEC.15, T.24 N., R.2 W., CLARK COUNTY, HYDROLOGIC UNIT 07040007, ON RIGHT BANK AT DOWNSTREAM SIDE OF BRIDGE ON U.S. HIGHWAY 10 IN NEILLSVILLE, 1.0 MI (1.6 KM) DOWNSTREAM FROM O'NEILL CREEK, AND 2.6 MI (4.2 KM) UPSTREAM FROM CUNNINGHAM CREEK.

DRAINAGE AREA.--756 MI² (1,958 KM²).

PERIOD OF RECORD.--APRIL 1905 TO MARCH 1909, OCTOBER 1913 TO CURRENT YEAR. MONTHLY DISCHARGE ONLY FOR SOME PERIODS, PUBLISHED IN WSP 1308.

REVISED RECORDS.--WSP 805: DRAINAGE AREA. WSP 1308: 1914. WSP 1438: 1905, 1906-8(M), 1914-17(M), 1918-19, 1920-25(M), 1926-27, 1928-29(M), 1930, 1931(M), 1932, 1933(M), 1934, 1935(M), 1936. WSP 1508: 1950.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 962.34 FT (293.321 M) REVISED, ABOVE MEAN SEA LEVEL. PRIOR TO OCT. 24, 1934, NONRECORDING GAGE.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

AVERAGE DISCHARGE.--66 YEARS (1905-8, 1913-76), 580 FT³/S (16.43 M³/S), 10.42 IN/YR (265 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 48,600 FT³/S (1,380 M³/S) SEPT. 10, 1938, GAGE HEIGHT, 23.8 FT (7.25 M); MINIMUM, 0.6 FT³/S (0.017 M³/S) AUG. 15, 1936, GAGE HEIGHT, 1.84 FT (0.561 M).

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 5,000 FT³/S (142 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)	DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)
NOV. 11	1100	6,580	186	9.90	3.018	APR. 25	0300	5,160	146	9.09	2.771
MAR. 30	1500	*15,000	425	*13.94	4.249						

MINIMUM DISCHARGE, 10 FT³/S (0.30 M³/S) SEPT. 10, 11, GAGE HEIGHT, 2.24 FT (0.683 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 28 TO MAR. 21.)

2.2	9.0	5.0	870
2.4	20	6.0	1,520
2.6	37	8.0	3,520
2.8	65	10.0	6,760
3.0	101	12.0	10,600
3.5	226	14.0	15,100
4.0	401		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	147	1600	160	96	220	8160	476	90	33	40	15
2	116	135	1100	150	96	240	4920	476	79	31	32	15
3	105	124	900	150	96	250	3050	502	77	29	35	14
4	99	118	700	140	96	220	2460	493	74	27	35	14
5	90	111	520	140	96	200	1970	436	68	26	48	12
6	82	107	400	140	94	180	1620	389	60	24	40	12
7	79	103	300	130	94	160	1420	346	53	25	34	12
8	74	101	220	130	94	140	1250	310	49	24	29	12
9	72	162	190	130	94	120	1090	280	47	22	26	12
10	70	3950	170	130	90	130	959	244	41	21	24	11
11	68	6220	160	120	98	140	886	214	38	19	24	11
12	67	4430	150	120	100	150	891	189	36	18	23	11
13	67	3160	200	120	110	170	856	175	42	17	22	12
14	68	2180	800	120	120	190	777	170	40	16	23	14
15	68	1420	1100	120	130	190	698	157	38	16	25	16
16	67	943	800	110	160	200	631	572	44	17	23	16
17	68	675	540	110	180	210	1050	772	52	17	21	16
18	67	543	400	110	220	230	3350	652	61	16	20	17
19	67	471	310	110	250	440	3510	616	66	26	20	19
20	65	753	270	110	290	5000	2670	438	70	72	19	21
21	64	2690	240	100	310	4500	2640	303	70	60	17	23
22	64	2440	220	100	280	3860	3770	229	65	45	17	21
23	65	1580	200	100	260	3310	2580	186	57	103	16	21
24	79	1030	190	100	240	5030	3240	157	52	86	15	21
25	133	621	180	100	210	5870	4260	133	49	63	14	24
26	185	350	170	100	190	7050	2530	115	42	49	14	23
27	299	307	180	100	190	7290	1360	99	37	40	14	21
28	291	290	190	100	200	5760	881	89	34	126	13	21
29	241	320	210	100	210	6350	661	89	35	120	12	20
30	195	2000	180	100	---	12800	530	93	34	60	11	21
31	166	---	170	98	---	12400	---	92	---	49	11	---
TOTAL	3370	37481	12960	3648	4694	83000	64670	9494	1600	1297	717	498
MEAN	109	1249	418	118	162	2677	2156	306	53.3	41.8	23.1	16.6
MAX	299	6220	1600	160	310	12800	8160	772	90	126	48	24
MIN	64	101	150	98	90	120	530	89	34	16	11	11
CFSM	.14	1.65	.55	.16	.21	3.54	2.85	.40	.07	.06	.03	.02
IN.	.17	1.84	.64	.18	.23	4.08	3.18	.47	.08	.06	.04	.02
CAL YR 1975	TOTAL	233254	MEAN 639	MAX 10100	MIN 22	CFSM .85	IN 11.48					
WTR YR 1976	TOTAL	223429	MEAN 610	MAX 12800	MIN 11	CFSM .81	IN 10.99					

BLACK RIVER BASIN

053R2000 BLACK RIVER NEAR GALESVILLE, WI

LOCATION.--LAT 44°04'22", LONG 91°17'41", IN SW 1/4 SEC.1, T.18 N., R.8 W., LACROSSE COUNTY, HYDROLOGIC UNIT 07040007, ON LEFT BANK 1,000 FT (305 M) UPSTREAM FROM BRIDGE ON U.S. HIGHWAY 53, 4.5 MI (7.2 KM) SOUTHEAST OF GALESVILLE, AND 4.8 MI (7.7 KM) DOWNSTREAM FROM FLEMING CREEK.

DRAINAGE AREA.--2,120 MI² (5,490 KM²), APPROXIMATELY.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--DECEMBER 1931 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1438: 1932-34, 1935-36(M).

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 658.43 FT (200.689 M) ABOVE MEAN SEA LEVEL, UNADJUSTED. PRIOR TO APR. 2, 1941, NONRECORDING GAGE ON BRIDGE 1,000 FT (305 M) DOWNSTREAM AT SAME DATUM. APR. 3, 1941, TO OCT. 1, 1971, WATER-STAGE RECORDER AT SITE 1,100 FT (335 M) DOWNSTREAM AT SAME DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR. FLOW PARTLY REGULATED BY MATFIELD DAM POWERPLANT WHERE DRAINAGE AREA IS 1,290 MI² (3,340 KM²) AND STORAGE CAPACITY IS 272,000,000 FT³ (7.70 HM³). WATER OVERTIED PERIODICALLY FROM BASIN INTO LEMONWEIR RIVER BASIN FOR CRANBERRY CULTURE.

AVERAGE DISCHARGE.--44 YEARS (1932-76), 1,683 FT³/S (47.66 M³/S) 10.78 IN/YR (274 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 65,500 FT³/S (1,850 M³/S) APR. 1, 1967, GAGE HEIGHT, 14.63 FT (4.459 M); MINIMUM OBSERVED, 180 FT³/S (5.10 M³/S) DEC. 20, 1932.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 12,500 FT³/S (354 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)	DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)
MAR. 23	1700	13,100 371	11.00 3.353	APR. 21	1700	12,900 365	10.91 3.325
APR. 1	1600	*22,300 632	*13.22 4.029				

MINIMUM DISCHARGE, 308 FT³/S (8.72 M³/S) SEPT. 11, 24, GAGE HEIGHT, 1.33 FT (0.405 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 26 TO MAR. 13.)

1.3	295	7.0	5,600
2.0	690	9.0	8,740
3.0	1,410	11.0	13,100
5.0	3,200	13.0	21,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	858	878	2100	1200	600	1500	19800	2790	981	605	696	360
2	844	778	4100	1100	600	1300	19500	2570	973	548	634	380
3	809	616	4000	1000	580	1200	14700	2370	1170	533	498	346
4	788	649	3600	960	580	1100	10200	2250	1010	516	592	350
5	690	767	2900	920	580	1100	6980	2130	985	484	603	360
6	570	812	2400	880	580	940	5120	2030	869	479	610	341
7	596	776	1900	840	580	880	3990	1870	777	512	572	336
8	725	710	1600	820	580	840	3150	1790	786	513	519	350
9	668	755	1400	780	580	820	3070	1710	837	469	456	365
10	652	932	1300	760	580	800	2810	1650	822	460	481	336
11	717	2040	1200	740	600	800	2490	1610	774	473	467	322
12	635	4220	1100	720	660	1400	2580	1500	735	417	454	360
13	511	5790	1100	720	700	2500	2350	1460	737	421	413	331
14	485	6090	1100	700	760	3540	2320	1460	656	428	385	331
15	616	4620	1400	700	860	3540	2250	1400	684	450	401	355
16	602	3290	2200	680	1000	3430	2220	1840	724	446	380	365
17	557	2550	4000	680	1100	3060	2160	3050	686	436	413	323
18	549	2220	5400	660	1300	2530	2680	4960	685	400	448	343
19	543	2030	4800	660	1400	1880	4680	6220	701	441	424	358
20	496	1930	4100	640	1500	2220	8700	4940	682	485	419	363
21	515	1940	3500	640	1600	3940	12600	3700	617	562	413	341
22	547	2690	3000	620	1400	6820	11200	2400	596	538	375	352
23	582	3820	2600	620	1300	12200	9530	1960	606	503	360	340
24	522	3840	2300	620	1300	10200	11300	1790	605	475	355	322
25	562	2750	2100	620	1200	8310	9810	1640	612	439	380	358
26	626	2200	1900	620	1200	8610	8470	1550	640	431	380	353
27	642	1900	1800	620	1500	9180	9670	1480	606	407	355	330
28	668	1700	1600	600	1600	9270	7540	1410	564	458	370	354
29	844	1600	1500	600	1600	11200	4990	1350	510	562	370	369
30	1210	1500	1400	600	---	10300	3400	1130	596	790	370	335
31	957	---	1300	600	---	9910	---	987	---	880	336	---
TOTAL	20586	66393	74700	22920	28420	135320	210260	68997	22226	15561	13929	10429
MEAN	664	2213	2410	739	980	4365	7009	2226	741	502	449	348
MAX	1210	6090	5400	1200	1600	12200	19800	6220	1170	880	696	380
MIN	485	616	1100	600	580	800	2160	987	510	400	336	322
CFSM	.31	1.04	1.14	.35	.46	2.06	3.31	1.05	.35	.24	.21	.16
IN.	.36	1.17	1.31	.40	.50	2.37	3.69	1.21	.39	.27	.24	.18
CAL YR 1975	TOTAL	699900	MEAN	1918	MAX	20800	MIN	336	CFSM	.90	IN	12.28
WTR YR 1976	TOTAL	689741	MEAN	1885	MAX	19800	MIN	322	CFSM	.89	IN	12.10

CHIPPEWA RIVER BASIN

05382000 BLACK RIVER NEAR GALESVILLE, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1954 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: MAY TO SEPTEMBER 1976.

REMARKS.--SEDIMENT RECORDS ARE FAIR. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 20 PERCENT OF THE PERIOD OF DAILY RECORD ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 45 MG/L MAY 21; MINIMUM DAILY MEAN, 2 MG/L SEPT. 26-30.

MAXIMUM OBSERVED, 52 MG/L AUG. 26; MINIMUM OBSERVED, 4 MG/L SEPT. 24.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 452 TONS (410 TONNES) MAY 21; MINIMUM DAILY, 1.6 TONS (1.5 TONNES) SEPT. 30.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 6, 1975	1515	14.5	557	-	June 29, 1976	1155	20.0	489	140
Jan. 16, 1976	1110	0.0	691	150	Aug. 10, 1976	1200	23.0	446	140
Feb. 28, 1976	1205	1.0	1,650	130	Sept. 15, 1976	1400	17.0	334	140

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
MAY, 1976					
21...	0915	3860	46	479	42
JUN					
15...	1331	624	16	27	95
JUL					
07...	1600	504	29	39	85
AUG					
26...	1200	390	25	26	95
SEP					
24...	1200	315	2	1.7	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BED MAT.	BED MAT.	BED MAT.	BED MAT.	BED MAT.	BED MAT.	BED MAT.
			SIEVE DIAM. % FINER THAN .125 MM	SIEVE DIAM. % FINER THAN .250 MM	SIEVE DIAM. % FINER THAN .500 MM	SIEVE DIAM. % FINER THAN 1.00 MM	SIEVE DIAM. % FINER THAN 2.00 MM	SIEVE DIAM. % FINER THAN 4.00 MM	SIEVE DIAM. % FINER THAN 8.00 MM
MAY, 1976									
21...	1015	3820	0	6	48	95	99	99	100
JUN									
15...	1600	640	0	5	35	85	96	99	100
JUL									
07...	1700	470	0	9	70	97	99	99	100
AUG									
26...	1200	390	0	7	61	96	99	99	100
SEP									
24...	1200	315	1	7	39	91	99	99	100

05382000 BLACK RIVER NEAR GALESVILLE, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TON/DAY), MAY TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	30	79	23	38	37	70	28	27
2			---	---	31	81	36	53	36	62	30	31
3			---	---	31	99	36	52	36	48	28	26
4			---	---	32	87	33	47	34	55	28	26
5			---	---	33	87	31	40	33	53	26	25
6			---	---	33	77	29	37	31	51	26	24
7			---	---	29	60	31	43	30	46	24	22
8			---	---	27	57	32	45	29	41	28	26
9			---	---	29	65	35	44	29	35	30	30
10			---	---	23	51	38	47	28	33	20	18
11			---	---	18	39	38	48	29	37	18	16
12			---	---	15	30	37	42	30	37	22	21
13			---	---	15	30	38	43	30	33	16	14
14			---	---	15	27	39	45	29	30	10	8.9
15			---	---	14	27	39	48	28	30	7	6.5
16			---	---	13	26	36	43	28	29	6	5.9
17			---	---	14	27	35	41	30	33	6	5.0
18			---	---	16	29	34	37	30	36	5	4.6
19			---	---	17	31	34	40	28	32	5	4.6
20			---	---	16	29	33	43	26	29	4	3.9
21			45	452	15	25	33	51	26	29	4	3.7
22			42	271	15	24	34	49	24	24	3	3.1
23			38	203	14	23	34	47	24	23	3	2.8
24			35	170	13	21	35	45	27	26	3	2.6
25			32	144	12	20	35	41	25	26	3	2.5
26			32	134	11	20	34	40	25	26	2	1.9
27			32	128	11	17	34	37	24	23	2	1.8
28			32	122	10	15	35	43	26	26	2	1.9
29			32	116	9	13	35	54	26	26	2	2.0
30			31	95	14	23	36	77	28	28	2	1.6
31			31	82	---	---	37	88	26	24	---	---
MONTH			---	---	---	1239.0	---	1448.0	---	1101.0	---	369.3

1917

~~68,928~~

112,847

BLACK RIVER BASIN

05382220 BLACK RIVER AT HIGHWAY 93 NEAR TREMPLEAU, WI

LOCATION.--LAT 43°59'59", LONG 91°19'43", IN NW 1/4 NW 1/4 SEC.34, T.18N., R.9W., AT BRIDGE ON STATE HIGHWAY 93 AT LA CROSSE-TREMPLEAU COUNTY LINE, HYDROLOGIC UNIT 07040007, 3.4 MI (5.5 KM) DOWNSTREAM FROM BEAVER CREEK AND 5.4 MI (8.7 KM) EAST OF TREMPLEAU.

DRAINAGE AREA.--2,303 MI² (5,960 KM²), APPROXIMATELY.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--APRIL 1975 TO MAY 1976 (DISCONTINUED).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: AUGUST 1975 TO MAY 1976.

REMARKS.--STREAMFLOW CORRELATED WITH 05382000 BLACK RIVER NEAR GALESVILLE, 7.42 MI (11.9 KM) UPSTREAM.

SUSPENDED-SEDIMENT SAMPLING SITE MOVED UPSTREAM TO 05382000 BLACK RIVER NEAR GALESVILLE MAY 21, 1976. SEDIMENT RECORDS ARE POOR. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 20 PERCENT OF THE PERIOD OF DAILY RECORD ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 390 MG/L AUG. 24; MINIMUM DAILY MEAN, 2 MG/L OCT. 11-14. MAXIMUM OBSERVED, 337 MG/L AUG. 24; MINIMUM OBSERVED, 1 MG/L FEB. 17, 21.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 11,700 TONS (10,600 TONNES) APR. 2; MINIMUM DAILY, 2.6 TONS (2.4 TONNES) OCT. 14.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
NOV , 1975									
10...	1200	--	--	123	--				96
FEB , 1976									
28...	1300	1.0	1890	50	255				68
MAR									
24...	0930	--	11800	113	3600				15
APR									
28...	1300	--	7020	56	1060				24

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	SUS- PENDE SEDI- MENT (MG/L)	SUS- SED. FALL DIAM. % FINER THAN .002 MM	SUS- SED. FALL DIAM. % FINER THAN .004 MM	SUS- SED. FALL DIAM. % FINER THAN .006 MM	SUS- SED. FALL DIAM. % FINER THAN .016 MM	SUS- SED. FALL DIAM. % FINER THAN .031 MM	SUS- SED. FALL DIAM. % FINER THAN .062 MM	SUS- SED. FALL DIAM. % FINER THAN .125 MM	SUS- SED. FALL DIAM. % FINER THAN .250 MM	SUS- SED. FALL DIAM. % FINER THAN .500 MM
NOV , 1975											
10...	1200	123	48	59	73	85	95	96	97	98	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM
OCT , 1975										
06...	1500	--	--	1	4	68	96	99	100	--
NOV										
10...	1200	--	2	5	12	66	93	98	99	100
MAR , 1976										
23...	1030	9630	--	0	9	73	95	98	99	100
APR										
28...	1100	7020	--	0	5	55	98	99	100	--

05382220 BLACK RIVER AT HIGHWAY 93 NEAR TREMPLEAU, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TDNS/DAY), AUGUST 1975 TO MAY 1976

DAY	AUGUST			SEPTEMBER					
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)			
1	405	26	28	3930	190	2020			
2	400	45	49	3600	170	1650			
3	379	39	40	2600	110	772			
4	407	44	49	2000	70	376			
5	373	31	31	1500	42	170			
6	426	22	26	1300	40	140			
7	408	17	18	1120	38	115			
8	385	17	17	1000	36	97			
9	372	18	19	980	30	79			
10	377	13	13	878	28	72			
11	366	11	11	1060	28	80			
12	358	11	11	1110	28	84			
13	354	13	13	1620	28	122			
14	358	9	9.1	2100	30	171			
15	348	10	9.2	2310	36	223			
16	347	13	12	2030	36	198			
17	337	17	15	1860	50	252			
18	332	20	18	1690	35	159			
19	340	18	16	1450	34	134			
20	352	30	28	1350	35	126			
21	336	57	52	1190	20	66			
22	399	107	117	1040	17	47			
23	629	203	357	1000	16	43			
24	2520	390	2780	1100	13	39			
25	3620	330	3170	1360	12	44			
26	4180	199	2250	1270	13	45			
27	4030	200	2140	1180	15	47			
28	3500	160	1510	1040	16	45			
29	3300	150	1340	757	17	36			
30	3100	140	1170	725	23	45			
31	3300	150	1340	---	---	---			
TOTAL	36338	---	16658.3	46150	---	7499			
DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	846	16	36	876	26	61	1970	8	41
2	846	11	26	834	25	55	3800	6	64
3	818	11	24	641	25	44	4340	30	351
4	788	12	25	598	64	105	3970	28	300
5	751	13	26	760	76	161	2900	12	94
6	585	12	18	808	24	51	2400	10	65
7	556	11	17	804	25	54	1900	9	46
8	716	11	20	691	23	43	1600	8	35
9	695	12	22	771	28	57	1400	10	39
10	642	4	7.7	872	63	150	1300	11	39
11	702	2	3.8	1490	30	121	1200	10	32
12	682	2	3.7	3830	28	284	1100	9	27
13	530	2	2.9	5370	28	408	1100	10	30
14	465	2	2.6	6290	43	730	1100	11	33
15	595	5	7.9	4980	36	487	1400	40	151
16	610	5	8.6	3640	30	291	2200	72	428
17	573	6	9.3	2640	29	209	4000	130	1400
18	541	7	10	2300	25	153	5400	160	2330
19	554	7	10	2070	27	151	4800	147	1900
20	502	5	6.2	1950	34	176	4100	11	122
21	512	6	7.6	1920	29	149	3500	9	85
22	543	6	8.5	2350	25	160	3000	6	49
23	578	4	6.8	3640	31	311	2600	38	267
24	531	9	13	3980	28	306	2300	24	149
25	551	20	29	2970	10	86	2100	20	113
26	607	22	36	2360	8	50	1900	40	205
27	637	34	58	2080	9	49	1800	22	107
28	638	47	81	1970	9	50	1600	22	95
29	810	70	153	1860	10	49	1500	49	198
30	1130	37	109	1670	8	34	1400	30	113
31	1050	26	74	---	---	---	1300	23	113
TOTAL	20584	---	862.6	67015	---	5035	74980	---	9021

BLACK RIVER BASIN

05382220 BLACK RIVER AT HIGHWAY 93 NEAR TREMPLEAU, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), AUGUST 1975 TO MAY 1976

DAY	JANUARY			FEBRUARY				MARCH	
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1200	32	104	600	5	8.1	1500	46	186
2	1100	28	83	600	5	8.1	1300	38	133
3	1000	25	68	580	4	6.3	1200	32	103
4	960	22	57	580	4	6.3	1100	28	83
5	920	20	50	580	4	6.3	1100	28	83
6	880	18	43	580	4	6.3	940	20	51
7	840	17	39	580	4	6.3	880	18	43
8	820	16	35	580	4	6.3	840	17	39
9	780	14	29	580	4	6.3	820	16	35
10	760	13	27	580	4	6.3	800	14	30
11	740	12	24	600	5	8.1	800	14	30
12	720	11	21	660	8	14	1400	91	344
13	720	11	21	700	9	17	2500	86	580
14	700	10	19	760	10	21	3450	80	748
15	700	10	19	860	18	42	3560	74	715
16	680	9	17	1000	25	68	3460	70	656
17	680	9	17	1100	28	83	3210	74	641
18	660	8	14	1300	38	133	2670	80	574
19	660	8	14	1400	44	166	1950	86	451
20	640	7	12	1500	46	186	2080	93	524
21	640	7	12	1600	48	207	3400	107	988
22	620	6	10	1400	44	166	5770	124	1950
23	620	6	10	1300	38	133	11200	140	4240
24	620	6	10	1300	38	133	11200	101	3150
25	620	6	10	1200	33	107	8510	86	1980
26	620	6	10	1200	33	107	8390	87	1970
27	620	6	10	1500	46	186	9220	87	2150
28	600	5	8.1	1600	50	216	8980	83	2010
29	600	5	8.1	1600	50	216	10900	78	2300
30	600	5	8.1	---	---	---	10800	75	2190
31	600	5	8.1	---	---	---	9480	79	2030
TOTAL	22920	---	817.4	28420	---	2275.7	133410	---	31007

DAY	APRIL			MAY			
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)
1	17000	76	3510	2830	39	301	983
2	20700	210	11700	2630	31	221	942
3	15800	180	7680	2410	25	163	1150
4	11300	130	3970	2280	25	153	1040
5	7670	100	2070	2150	25	148	965
6	5500	90	1340	2060	26	146	918
7	4270	95	1100	1900	27	139	790
8	3250	90	790	1800	27	131	760
9	3090	78	651	1730	27	126	846
10	2900	75	592	1670	27	122	808
11	2510	72	492	1620	27	118	797
12	2610	70	493	1530	27	112	740
13	2370	71	456	1470	27	107	753
14	2330	73	462	1460	27	107	663
15	2270	74	453	1420	28	109	668
16	2230	57	341	1650	31	141	723
17	2170	48	283	2610	46	332	695
18	2420	51	336	4500	69	853	664
19	4070	57	629	6130	90	1490	691
20	7390	58	1150	5330	72	1060	703
21	12100	31	1020	4050	---	---	630
22	11900	40	1260	2620	---	---	590
23	9620	60	1540	2030	---	---	614
24	10800	63	1860	1830	---	---	594
25	10600	63	1790	1680	---	---	620
26	8410	62	1420	1570	---	---	632
27	9480	60	1550	1490	---	---	616
28	8360	59	1330	1430	---	---	572
29	5510	60	898	1380	---	---	530
30	3750	50	509	1170	---	---	---
31	---	---	---	1020	---	---	---
TOTAL	212380	---	51675	69450	---	---	21757

5/16/76

6079

05389500 MISSISSIPPI RIVER AT MC GREGOR, IA

LOCATION.--LAT 43°01'29", LONG 91°10'21", IN SE 1/4 SE 1/4 SEC.22, T.9S N., R.3 W., CLAYTON COUNTY, HYDROLOGIC UNIT 07060001, ON RIGHT BANK IN CITY PARK AT EAST END OF MAIN STREET IN MC GREGOR, 2.6 MI (4.2 KM) UPSTREAM FROM WISCONSIN RIVER, 4.3 MI (6.9 KM) DOWNSTREAM FROM YELLOW RIVER, AND AT MILE 633.4 (1,019.1 KM) UPSTREAM FROM OHIO RIVER.

DRAINAGE AREA.--67,500 MI² (174,800 KM²), APPROXIMATELY.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--AUGUST 1936 TO CURRENT YEAR.

REVISED RECORDS.--WOR IA-75-1: 1974.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 605.30 FT (184.495 M) ABOVE MEAN SEA LEVEL, ADJUSTMENT OF 1912. PRIOR TO JUNE 1, 1937, AND SINCE JUNE 2, 1939, AUXILIARY WATER-STAGE RECORDER; JUNE 1, 1937, TO JUNE 1, 1939, AUXILIARY NONRECORDING GAGE 14.1 MI (22.7 KM) UPSTREAM IN TAILWATER OF DAM 9, AT DATUM 5.30 FT (1.615 M) LOWER.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR. STAGE-DISCHARGE RELATION AFFECTED BY BACKWATER FROM WISCONSIN RIVER AND LOCK AND DAM NO. 10. FLOW REGULATED BY NAVIGATION DAMS.

COOPERATION.--AUXILIARY GAGE-HEIGHT AND DISCHARGE DATA AT LOCK AND DAM NO. 9 FURNISHED BY CORPS OF ENGINEERS.

AVERAGE DISCHARGE.--40 YEARS, 33,720 FT³/S (954.8 M³/S), 6.78 IN/YR (172 MM/YR), 24,430,000 ACRE-FT/YR (30,100 HM³/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DAILY DISCHARGE, 276,000 FT³/S (7,820 M³/S) APR. 24, 1965; MAXIMUM GAGE HEIGHT, 25.38 FT (7.736 M) APR. 24, 1965; MINIMUM DAILY DISCHARGE, 6,200 FT³/S (176 M³/S) DEC. 9, 1936; MINIMUM GAGE HEIGHT, -0.86 FT (-0.262 M) AUG. 18, 1936.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--MAXIMUM STAGE SINCE AT LEAST 1928, THAT OF APR. 24, 1965.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DAILY DISCHARGE, 125,000 FT³/S (3,540 M³/S) APR. 8, 9; MAXIMUM GAGE HEIGHT, 17.21 FT (5.246 M) APR. 8; MINIMUM DAILY DISCHARGE, 8,000 FT³/S (227 M³/S) AUG. 6, 7; MINIMUM GAGE HEIGHT, 5.80 FT (1.768 M) SEPT. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22900	20400	27700	25900	20200	35200	79000	70500	17500	15700	15600	8700
2	20400	20300	27400	25800	20000	34800	85100	66000	20200	15400	14700	8700
3	18100	20300	27200	25500	20000	35500	93400	54900	21100	15500	14100	8500
4	17400	19300	28600	24100	19500	34900	101000	41800	21500	15200	12500	8400
5	18400	19600	30900	22500	19000	32900	109000	36000	21100	14000	8400	9200
6	17800	19400	34400	22300	18900	31700	118000	35400	20800	14700	8000	9100
7	16000	19600	35900	22200	19000	30200	123000	35900	20500	13500	8000	9300
8	15600	18700	37800	21100	19400	32400	125000	36200	18700	14200	9000	9600
9	15300	18900	38300	19700	19600	34100	125000	36100	16400	15200	10800	10700
10	14600	23900	38100	19000	20000	32900	124000	34200	12800	13200	11500	12200
11	13600	24600	37800	18900	20000	32200	120000	28200	12800	11400	11800	12200
12	13200	27100	36400	18900	20000	35900	115000	24700	15600	11900	11500	12000
13	14900	34500	33500	18900	20600	51600	108000	25200	16100	10700	11600	12000
14	17700	37600	31500	18800	21900	66000	102000	25400	15800	10500	11600	12200
15	17800	40700	30000	18800	23400	72700	97000	25700	17500	11000	12000	12300
16	17300	42000	28400	18800	25200	72800	92100	28900	17200	15000	12200	12300
17	16200	43800	24600	19000	27200	59800	89200	31400	15700	13800	11800	12300
18	16000	43600	19300	19000	30100	47800	85500	32500	13800	13200	11000	12300
19	15200	41900	11600	19200	35000	41700	83900	29900	13400	12700	11000	12300
20	16200	39700	11600	19300	43200	39200	80800	25700	14000	10500	11000	12400
21	15100	38100	16500	19400	46100	38800	78800	23300	17300	11500	11200	13200
22	15300	35200	18900	19700	48400	39300	77800	22400	20200	11800	11400	15000
23	16800	35200	21300	19600	47500	42800	78300	21400	22200	12100	11600	16000
24	16400	35500	22000	20700	44300	47700	79500	21100	21400	12100	11500	16200
25	18500	36100	23100	20600	39900	53600	78600	19900	19600	12100	10600	16800
26	20200	36500	24700	20600	37200	58500	77600	18200	18000	11800	10300	15300
27	21000	36600	25500	20600	36200	62600	76500	16600	17300	11400	10500	12200
28	24300	33600	25400	20500	36400	61800	75800	15600	16800	12400	10400	10200
29	23400	30400	25500	21300	36100	64900	75200	15500	15100	14000	10000	8800
30	21600	31100	25800	21300	---	70100	74400	15300	16200	15100	9400	8400
31	20400	---	25900	20500	---	73200	---	15600	---	15600	8800	---
TOTAL	547600	924200	845600	642400	834300	1467600	2828500	929500	526600	407200	343800	348800
MEAN	17660	30810	27280	20720	28770	47340	94280	29980	17550	13140	11090	11630
MAX	24300	43800	38300	25900	48400	73200	125000	70500	22200	15700	15600	16800
MIN	13200	18700	11600	18800	18900	30200	74400	15300	12800	10500	8000	8400
CFSM	.26	.46	.40	.31	.43	.70	1.40	.44	.26	.19	.16	.17
IN.	.30	.51	.47	.35	.46	.81	1.56	.51	.29	.22	.19	.19
CAL YR 1975 TOTAL	14835400	MEAN	40640	MAX	183000	MIN	11600	CFSM	.60	IN	8.18	
WTR YR 1976 TOTAL	10646100	MEAN	29090	MAX	125000	MIN	8000	CFSM	.43	IN	5.87	

WISCONSIN RIVER BASIN

05390500 ANVIL LAKE NEAR EAGLE RIVER, WI

LOCATION.--LAT 45°57'10", LONG 89°03'11", IN SEC.13, T.40 N., R.11 E., VILAS COUNTY, HYDROLOGIC UNIT 07070001, ON NORTH SIDE OF LAKE, 11 MI (17.7 KM) NORTHEAST OF EAGLE RIVER.

DRAINAGE AREA.--3 MI² (8 KM²), APPROXIMATELY. AREA OF ANVIL LAKE, 380 ACRES (1.54 KM²).

PERIOD OF RECORD.--AUGUST 1936 TO CURRENT YEAR (FRAGMENTARY).

GAGE.--NONRECORDING GAGE. DATUM OF GAGE IS 90.00 FT (27.4 M) ABOVE DATUM ASSUMED BY WISCONSIN DEPARTMENT OF NATURAL RESOURCES; GAGE READINGS HAVE BEEN REDUCED TO ELEVATIONS ABOVE THIS DATUM. PRIOR TO AUG. 13, 1950, STAFF GAGE 0.3 MI (0.5 KM) SOUTH AT SAME DATUM.

REMARKS.--ADD 90 FT (27.4 M) TO OBTAIN ELEVATION ABOVE DATUM ASSUMED FOR THIS LAKE BY WISCONSIN DEPARTMENT OF NATURAL RESOURCES. LAKE HAS NO SURFACE OUTLET. LAKE WAS ICE COVERED ABOUT NOV. 25 TO APR. 15.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM ELEVATION OBSERVED, 7.20 FT (2.195 M) MAY 3, 7, 17, 21, 24, 28, JUNE 20, 24, 1943; MINIMUM OBSERVED, 2.10 FT (0.640 M) JULY 31, 1964.

EXTREMES FOR CURRENT YEAR.--MAXIMUM ELEVATION OBSERVED, 4.87 FT (1.484 M) APR. 6; MINIMUM OBSERVED, 3.38 FT (1.030 M) SEPT. 29.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	---	---	---	---	---	---	---	---	---	3.56
2		---	---	---	---	---	---	---	---	---	---	---
3		---	---	---	---	---	---	---	---	4.38	3.87	---
4		---	---	---	---	---	---	---	---	---	---	---
5		---	---	---	---	---	---	---	---	---	---	---
6		---	---	---	---	---	4.87	---	---	---	---	---
7		---	---	---	4.51	---	---	---	---	---	---	---
8		4.26	---	---	---	---	---	4.68	---	---	---	---
9		---	---	---	---	---	---	---	---	---	---	3.41
10		---	---	---	---	---	---	---	---	---	---	---
11		---	---	---	---	---	---	---	---	---	---	3.58
12		---	---	---	---	---	---	---	---	---	---	---
13		---	---	---	---	---	---	---	---	---	---	---
14		---	---	---	---	---	---	---	---	---	---	---
15		---	---	---	---	---	---	---	---	---	---	---
16		---	---	---	---	---	---	---	---	---	---	---
17		---	---	4.36	---	---	---	---	---	4.43	---	---
18		---	---	---	---	---	---	---	---	---	---	---
19		---	---	---	---	---	---	---	4.73	---	---	---
20		---	---	---	---	---	---	---	---	---	---	---
21		---	---	---	---	---	---	---	---	---	3.93	---
22		4.00	---	---	---	---	---	4.78	---	3.99	---	---
23		---	4.51	---	---	---	---	---	---	---	---	---
24		---	---	---	---	---	---	---	---	---	---	---
25		4.31	---	---	4.56	---	---	---	---	---	---	---
26		---	---	---	---	---	---	4.53	4.68	---	---	---
27		---	---	---	---	---	---	---	---	---	---	---
28		---	---	4.52	---	---	---	---	---	---	---	---
29		4.31	---	---	---	---	---	---	---	---	---	3.38
30		---	---	---	---	---	---	---	---	---	---	---
31		---	4.36	---	---	4.41	---	---	---	4.23	---	---

05391000 WISCONSIN RIVER AT RAINBOW LAKE, NEAR LAKE TOMAHAWK, WI

LOCATION.--LAT 45°49'58", LONG 89°32'51", IN S 1/2 SW 1/4 SEC.30, T.39 N., R.8 E., ONEIDA COUNTY, HYDROLOGIC UNIT 07070001, ON RIGHT BANK 400 FT (122 M) UPSTREAM FROM GILMORE CREEK, 0.3 MI (0.5 KM) DOWNSTREAM FROM RAINBOW LAKE, AND 2.5 MI (4.0 KM) NORTHEAST OF LAKE TOMAHAWK. RECORDS INCLUDE FLOW OF GILMORE CREEK.

DRAINAGE AREA.--750 MI² (1,940 KM²), APPROXIMATELY, INCLUDES THAT OF GILMORE CREEK.

PERIOD OF RECORD.--JULY 1936 TO CURRENT YEAR. PRIOR TO OCTOBER 1955, PUBLISHED AS "AT RAINBOW RESERVOIR, NEAR LAKE TOMAHAWK."

REVISED RECORDS.--WSP 895: 1937(m), WSP 1508: 1944.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 1,570.05 FT (478.551 M) ABOVE MEAN SEA LEVEL (PUBLIC SERVICE COMMISSION OF WISCONSIN BENCH MARK).

REMARKS.--RECORD GOOD. FLOW REGULATED BY RAINBOW LAKE AND 12 SMALLER RESERVOIRS ABOVE STATION (SEE P. 368).

AVERAGE DISCHARGE.--40 YEARS, 699 FT³/S (19.80 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 3,570 FT³/S (101 M³/S) SEPT. 5, 1941. GAGE HEIGHT, 7.59 FT (2.313 M); MINIMUM, 17 FT³/S (0.48 M³/S) OCT. 10-12, 1940; MINIMUM DAILY, 35 FT³/S (0.99 M³/S) APR. 6, 1955.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 1,240 FT³/S (35.1 M³/S) MAY 1; GAGE HEIGHT, 3.77 FT (1.149 M); MINIMUM DAILY, 236 FT³/S (6.68 M³/S) NOV. 11, 12.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(SHIFTING-CONTROL METHOD USED NOV. 11-13.)

1.1	234	3.0	875
1.5	340	4.0	1,350
2.0	490		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	499	376	500	778	782	1050	299	1160	610	539	535	474
2	572	364	686	782	782	1040	288	1100	638	538	534	428
3	604	337	942	778	778	1030	283	1000	705	549	543	406
4	577	406	1040	778	778	1010	291	898	731	565	547	402
5	507	460	942	810	857	999	294	862	746	569	381	409
6	477	481	866	834	916	984	291	852	729	566	319	417
7	481	451	866	839	906	964	302	893	694	560	393	428
8	484	391	818	848	902	951	304	726	661	553	502	405
9	475	379	738	844	911	935	331	612	655	609	582	379
10	430	295	706	844	911	919	350	620	677	607	571	385
11	421	236	662	839	911	930	352	680	711	575	519	391
12	394	236	630	844	983	967	344	731	749	556	495	379
13	400	268	626	806	1080	980	318	674	762	582	473	343
14	403	312	746	786	1120	946	299	670	742	603	441	298
15	436	340	806	790	1120	909	291	670	726	589	463	306
16	457	349	798	822	1120	911	309	666	676	578	481	295
17	454	364	802	852	1110	896	311	641	663	582	476	295
18	451	400	806	857	1100	843	282	684	676	587	484	298
19	451	406	802	852	1100	846	253	674	674	579	465	301
20	451	397	798	857	1090	941	292	638	665	511	481	304
21	451	403	802	818	1080	929	282	623	662	502	473	286
22	451	409	798	798	1070	763	637	649	664	581	463	279
23	454	406	798	802	1110	571	968	646	610	577	469	270
24	445	403	798	798	1120	522	1070	638	570	575	470	262
25	394	427	790	798	1110	513	1110	634	571	588	453	264
26	403	484	786	790	1100	494	1070	655	565	606	444	261
27	436	511	790	790	1090	474	811	675	542	578	434	259
28	436	487	786	790	1080	446	550	679	509	553	441	246
29	439	478	790	786	1070	403	508	689	521	548	446	243
30	418	497	786	786	---	321	827	652	540	539	457	246
31	406	---	782	790	---	289	---	627	---	537	480	---
TOTAL	14157	11753	24286	25186	29087	24776	13917	22618	19644	17581	14715	9959
MEAN	457	392	783	812	1003	799	464	730	655	567	475	332
MAX	604	511	1040	857	1120	1050	1110	1160	762	609	582	474
MIN	394	236	500	778	778	289	253	612	509	502	319	243
CAL YR 1975	TOTAL	221981	MEAN 608	MAX 1040	MIN 203							
WTR YR 1976	TOTAL	227679	MEAN 622	MAX 1160	MIN 236							

WISCONSIN RIVER BASIN

05391226 PELICAN RIVER NEAR RHINELANDER, WI

LOCATION.--LAT 45°35'05", LONG 89°16'05", IN NE 1/4 NE 1/4 SEC.30, T.36 N., R.10 E., ONEIDA COUNTY, HYDROLOGIC UNIT 07070001, ON RIGHT BANK AT RAPIDS, 750 FT (230 M) UPSTREAM FROM BEAVER CREEK, 1.2 MI (1.9 KM) UPSTREAM FROM NORTH BRANCH OF PELICAN RIVER, AND 7.1 MI (11.4 KM) SOUTHEAST OF RHINELANDER.

DRAINAGE AREA.--101 MI² (262 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--JANUARY TO SEPTEMBER 1976.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 1,560 FT (475 M) FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR. FLOW REGULATED BY SOUTH PELICAN LAKE 6.9 MI (11.1 KM) UPSTREAM (SEE P. 368).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE DURING THE PERIOD JANUARY TO SEPTEMBER, 707 FT³/S (20.0 M³/S) APR. 2; GAGE HEIGHT, 18.49 FT (5.636 M); MINIMUM, 0.09 FT³/S (0.002 M³/S) SEPT. 15, 16; GAGE HEIGHT, 13.69 FT (4.173 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE JAN. 1 TO MAR. 27.)

JAN. 1 TO JUNE 19		JUNE 20 TO SEPT. 30			
14.7	17	13.9	0.6	15.1	40
14.9	27	14.0	1.4	15.5	75
		14.1	2.4	16.0	135
NOTE.--SAME AS FOLLOWING		14.3	5.4	17.0	315
TABLE ABOVE 15.1 FT.		14.5	10.2	18.0	560
		14.8	22.2	19.0	890

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				70	56	68	576	261	69	6.9	1.5	.24
2				66	56	68	671	247	63	6.9	1.4	.22
3				62	54	68	645	235	54	6.7	2.1	.24
4				62	54	68	544	223	46	6.7	2.3	.26
5				64	54	68	506	213	38	6.0	3.4	.28
6				66	56	68	482	203	30	4.9	4.9	.28
7				66	56	68	467	190	23	4.2	8.0	.28
8				64	58	68	460	169	20	3.7	15	.24
9				62	58	68	453	129	18	3.3	16	.24
10				62	58	68	444	102	16	3.2	14	.18
11				62	58	68	437	88	25	2.9	13	.16
12				60	60	68	419	78	41	2.5	12	.14
13				58	58	68	394	70	51	2.3	9.4	.12
14				56	58	70	360	67	49	2.0	11	.10
15				54	58	70	338	66	34	1.7	9.9	.09
16				54	58	70	328	96	28	1.5	7.8	.09
17				52	58	72	327	157	23	1.5	5.8	.10
18				50	58	80	357	211	21	1.5	4.0	.14
19				52	58	90	442	249	20	1.3	3.1	.16
20				52	60	110	546	251	20	2.1	2.4	.18
21				54	62	130	603	221	17	3.6	1.8	.20
22				54	62	140	620	184	14	4.9	1.2	.26
23				56	64	130	604	159	11	5.1	.84	.30
24				56	66	120	562	136	9.4	4.7	.92	.42
25				54	68	120	507	105	8.9	3.7	.84	.48
26				52	68	130	449	88	9.1	2.9	.60	.51
27				52	68	160	390	78	9.1	2.2	.48	.51
28				54	68	206	345	71	8.6	1.8	.39	.54
29				54	68	266	307	66	6.7	1.8	.36	.54
30				56	---	386	279	70	6.7	1.8	.30	.57
31				56	---	505	---	69	---	1.6	.26	---
TOTAL				1792	1738	3739	13862	4552	789.5	105.9	154.99	8.07
MEAN				57.8	59.9	121	462	147	26.3	3.42	5.00	.27
MAX				70	68	505	671	261	69	6.9	16	.57
MIN				50	54	68	279	66	6.7	1.3	.26	.09
CFSM				.57	.59	1.20	4.57	1.46	.26	.03	.05	.002
IN.				.66	.64	1.38	5.11	1.68	.29	.04	.06	.003

05391226 PELICAN RIVER NEAR RHINELANDER, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD---SEPTEMBER 1975 TO CURRENT YEAR.

WATER QUALITY DATA, SEPTEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	HARDNESS (CA, MG)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)
SEP , 1975												
26...	1315	--	78	--	9.0	100	--	--	31	10	7.8	2.9
FEB , 1976												
24...	1400	67	90	6.8	1.5	48	--	--	44	8	10	4.5
APR												
27...	1300	392	55	6.8	8.5	50	9.6	86	20	7	4.6	2.0
JUN												
15...	1300	35	80	6.8	24.5	140	7.0	88	31	8	7.5	3.0
AUG												
13...	1130	9.3	120	7.2	23.0	45	6.8	81	46	8	11	4.5

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED PHOSPHORIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)
SEP , 1975												
26...	2.7	15	.2	.7	26	0	21	--	8.8	3.4	.2	9.1
FEB , 1976												
24...	2.7	12	.2	.9	43	0	35	11	8.2	4.0	.1	13
APR												
27...	1.4	13	.1	.9	16	0	13	4.1	5.0	2.7	.1	2.0
JUN												
15...	2.1	13	.2	.7	28	0	23	7.1	4.3	2.5	.1	5.3
AUG												
13...	3.1	13	.2	.5	46	0	38	4.6	6.7	5.8	.1	5.6

DATE	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE IN BOTTOM MATERIAL (N) (MG/KG)	TOTAL NITRATE PLUS NITRITE (N) (MG/L)	TOTAL NITRATE PLUS NITRITE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL AMMONIA NITROGEN IN BOTTOM MAT. (MG/KG)
SEP , 1975											
26...	78	49	.11	--	.00	.00	.0	.00	.3	.01	.0
FEB , 1976											
24...	97	65	.13	17.7	.16	.01	--	.17	--	.07	--
APR											
27...	57	27	.08	60.3	.04	.02	--	.06	--	.06	--
JUN											
15....	78	41	.11	7.46	.25	.04	3.5	.29	4.2	.06	13
AUG											
13...	80	60	.11	2.03	.03	.01	--	.04	--	.02	--

DATE	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL NITROGEN IN BOTTOM MATERIAL (N) (MG/KG)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS IN BOTTOM MATERIAL (MG/KG)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (MG/KG)
SEP , 1975											
26...	.57	.58	100	.58	2.6	100	.03	290	--	22	3.4
FEB , 1976											
24...	.47	.54	--	.71	3.1	--	.05	--	9.7	9.1	--
APR											
27...	.57	.63	--	.69	3.1	--	.03	--	16	16	--
JUN											
15...	.82	.88	170	1.2	5.2	--	.06	67	24	24	2.6
AUG											
13...	.58	.60	--	.64	2.8	--	.03	--	16	15	--

WISCONSIN RIVER BASIN

05391226 PELICAN RIVER NEAR RHINELANDER, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR SEPTEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DTS- CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDE D ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MA- TERIAL (UG/G)	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDE D CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL CHRO- MIUM (CR) (UG/L)
SEP , 1975											
26...	1315	--	0	0	0	2	0	0	0	0	<10
FEB , 1976											
24...	1400	67	1	0	1	--	1	0	1	--	<10
APR											
27...	1300	392	0	0	0	--	1	0	1	--	<10
JUN											
15...	1300	35	0	0	0	1	1	0	1	0	<10
AUG											
13...	1130	9.3	0	0	1	--	3	0	3	--	<10

DATE	SUS- PENDE D CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL COBALT (CO) (UG/L)	SUS- PENDE D COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MA- TERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	SUS- PENDE D COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MA- TERIAL (UG/G)
SEP , 1975											
26...	<10	0	0	0	0	0	--	2	2	0	--
FEB , 1976											
24...	0	<10	--	0	0	0	--	0	0	0	--
APR											
27...	0	<10	--	0	0	0	--	0	0	0	--
JUN											
15...	0	<10	0	0	0	0	0	0	0	0	1
AUG											
13...	0	<10	--	2	0	2	--	0	0	0	--

DATE	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MA- TERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	SUS- PENDE D LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MA- TERIAL (UG/G)	TOTAL MAN- GANESE (MN) (UG/L)	SUS- PENDE D MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MANGA- NESE IN BOTTOM MA- TERIAL (UG/G)
SEP , 1975											
26...	490	300	19000	0	0	0	0	10	0	10	620
FEB , 1976											
24...	700	490	--	7	4	3	--	60	0	60	--
APR											
27...	540	350	--	3	1	2	--	20	0	20	--
JUN											
15...	1800	1000	2700	4	0	4	5	210	40	170	520
AUG											
13...	560	390	--	3	0	3	--	80	30	50	--

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MA- TERIAL (UG/G)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDE D SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL SELE- NIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDE D ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MA- TERIAL (UG/G)
SEP , 1975										
26...	<.5	<.5	0	0	0	0	10	9	1	40
FEB , 1976										
24...	<.5	--	1	0	1	--	20	0	20	--
APR										
27...	<.5	--	0	0	0	--	10	0	10	--
JUN										
15...	<.5	<.5	0	0	0	0	30	0	30	15
AUG										
13...	<.5	--	2	2	0	--	20	0	20	--

05391226 PELICAN RIVER NEAR RHINELANDER, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR SEPTEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)
SEP , 1975												
26...	1315	--	.0	7	--	.00	.0	.0	0	.00	.0	.00
JUN , 1976												
15...	1300	35	.0	0	.00	.00	.0	.0	0	.00	.0	.00

DATE	TIME	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	DI-AZINON IN BOTTOM MATERIAL (UG/L)	DI-AZINON IN BOTTOM MATERIAL (UG/KG)	TOTAL DIELDRIN (UG/L)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)
SEP , 1975													
26...		.0	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00
JUN , 1976													
15...		.0	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00

DATE	TIME	HEPTA-CHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	MALATHION IN BOTTOM MATERIAL (UG/KG)	TOTAL METHOXYCHLOR (UG/L)	METHOXYCHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL METHYL PARATHION (UG/L)	METHYL PARATHION IN BOTTOM MATERIAL (UG/KG)	TOTAL METHYL TRITHION (UG/L)	METHYL TRITHION IN BOTTOM MATERIAL (UG/KG)
SEP , 1975														
26...		.0	.00	.0	.00	.0	.00	--	--	.00	.0	.00	.0	.00
JUN , 1976														
15...		.0	.00	.0	.00	.0	.00	.00	.0	.00	.0	.00	.0	.00

DATE	TIME	TOTAL PARATHION (UG/L)	PARATHION IN BOTTOM MATERIAL (UG/KG)	TOTAL TOXAPHENE (UG/L)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRIETHION (UG/L)	TRIETHION IN BOTTOM MATERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MATERIAL (UG/KG)	TOTAL 2,4,5-T (UG/L)	2,4,5-T IN BOTTOM MATERIAL (UG/KG)	TOTAL SILVEX (UG/L)	SILVEX IN BOTTOM MATERIAL (UG/KG)
SEP , 1975													
26...		.00	.0	0	0	.00	.0	--	0	--	0	--	0
JUN , 1976													
15...		.00	.0	0	0	.00	.0	.00	0	.00	0	.00	0

WATER QUALITY DATA

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Dec. 24, 1975	1100	0.0	102	-	June 15, 1976	1300	24.5	35.4	80
Jan. 16, 1976	1430	0.0	53.7	80	July 22, 1976	1230	25.0	5.58	120
Feb. 24, 1976	1300	1.5	67.4	90	Aug. 13, 1976	1130	23.0	9.38	120
Mar. 30, 1976	1545	0.5	407	-					
Apr. 5, 1976	1440	2.5	507	50					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
APR , 1976					
05...	1445	2.5	507	6	8.2

WISCONSIN RIVER BASIN

05393500 SPIRIT RIVER AT SPIRIT FALLS, WI

LOCATION.--LAT 45°26'58", LONG 89°58'47". IN NW 1/4 SEC.10, T.34 N., R.4 E., LINCOLN COUNTY, HYDROLOGIC UNIT 07070001, NEAR CENTER OF SPAN ON DOWNSTREAM SIDE OF BRIDGE 0.2 MI (0.3 KM) SOUTH OF SPIRIT FALLS, 0.6 MI (1.0 KM) UPSTREAM FROM SQUAW CREEK, AND 2.0 MI (3.2 KM) DOWNSTREAM FROM RICHIE CREEK.

DRAINAGE AREA.--82 MI² (212 KM²), APPROXIMATELY.

PERIOD OF RECORD.--APRIL 1942 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1208: DRAINAGE AREA. WSP 1308: 1943(M), 1948-50(M).

GAGE.--NONRECORDING GAGE AND CREST-STAGE GAGE. ALTITUDE OF GAGE IS 1460 FT (445 M), (CORRECTED) FROM RIVER-PROFILE MAP.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

AVERAGE DISCHARGE.--34 YEARS, 84.5 FT³/S (2.393 M³/S), 13.99 IN/YR (355 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 4,180 FT³/S (118 M³/S) SEPT. 18, 1942, GAGE HEIGHT, 10.00 FT (3.048 M), FROM RATING CURVE EXTENDED ABOVE 2,500 FT³/S (70.8 M³/S); MINIMUM OBSERVED, 1.0 FT³/S (0.028 M³/S) AUG. 11, 1964, GAGE HEIGHT, 0.85 FT (0.259 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 1,910 FT³/S (54.1 M³/S) MAR. 30, GAGE HEIGHT, 6.69 FT (2.039 M); MAXIMUM GAGE HEIGHT, 10.01 FT (3.051 M) MAR. 30, (BACKWATER FROM ICE); MINIMUM OBSERVED, 2.2 FT³/S (0.062 M³/S) AUG. 31, GAGE HEIGHT, 0.92 FT (0.280 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 20-22, 25-27, DEC. 6-8, DEC. 20 TO MAR. 30.)

OCT. 1 TO MAR. 29				MAR. 30 TO SEPT. 30			
1.6	21	3.0	220	0.9	2.0	2.2	78
1.9	42	4.0	470	1.1	4.3	2.6	134
2.3	88	5.0	830	1.2	6.3	3.0	210
		6.0	1,370	1.3	9.2	4.0	470
				1.5	18	5.0	870
				1.8	37	6.0	1,400

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	85	830	35	20	37	915	114	36	6.6	6.6	3.8
2	25	78	560	33	20	35	808	114	24	6.3	5.5	3.9
3	24	75	548	31	20	32	820	104	19	4.9	5.1	3.7
4	26	67	518	29	20	31	528	96	16	4.7	4.5	3.5
5	26	69	488	27	20	32	528	86	14	4.5	11	3.3
6	24	61	520	25	20	31	516	70	13	4.5	12	3.3
7	37	63	500	24	20	30	556	72	12	4.1	7.5	3.1
8	54	117	450	23	20	30	482	72	11	3.9	6.1	3.1
9	80	99	350	23	20	29	389	58	9.2	3.9	5.7	3.0
10	90	566	325	22	20	28	347	51	8.6	3.7	5.3	3.0
11	98	1200	280	22	20	28	491	46	8.9	3.5	7.5	2.8
12	104	650	210	22	20	28	389	43	8.6	3.5	8.6	2.8
13	98	485	214	22	20	28	272	40	8.6	3.2	7.8	2.8
14	106	328	425	22	21	28	228	33	8.9	3.2	5.1	2.9
15	113	252	598	22	22	29	236	30	7.8	3.1	4.5	2.9
16	126	204	545	22	23	30	204	32	10	3.2	3.7	2.8
17	120	166	388	22	24	31	188	67	9.2	3.2	3.6	2.8
18	122	142	230	22	25	32	236	49	8.6	3.1	3.5	2.7
19	120	118	172	22	27	42	365	45	22	3.1	3.3	2.6
20	122	140	170	21	28	68	290	35	25	5.5	3.3	2.8
21	129	150	150	21	28	110	228	30	15	11	3.1	2.8
22	117	160	110	21	29	160	326	30	12	8.6	3.0	2.7
23	135	158	86	21	30	210	356	24	8.9	5.3	2.9	2.7
24	140	129	74	21	31	330	274	19	8.9	4.7	2.8	2.6
25	258	140	66	21	32	500	280	18	8.3	3.7	2.7	2.8
26	230	150	60	21	33	700	180	17	7.8	3.7	2.6	2.8
27	192	160	52	21	34	880	168	16	6.6	3.6	2.9	3.5
28	152	162	47	21	38	1100	145	15	6.6	3.5	2.8	3.2
29	127	200	43	21	37	1400	124	13	6.3	5.1	2.7	3.2
30	109	618	40	21	---	1800	108	15	6.9	4.7	2.3	3.5
31	93	---	38	21	---	1510	---	37	---	5.3	2.2	---
TOTAL	3227	6992	9087	722	722	9359	10977	1491	367.7	140.9	150.2	91.4
MEAN	104	233	293	23.3	24.9	302	366	48.1	12.3	4.55	4.85	3.05
MAX	258	1200	830	35	38	1800	915	114	36	11	12	3.9
MIN	24	61	38	21	20	28	108	13	6.3	3.1	2.2	2.6
CFSM	1.27	2.84	3.57	.28	.30	3.68	4.46	.59	.15	.06	.06	.04
IN.	1.46	3.17	4.12	.33	.33	4.25	4.98	.68	.17	.06	.07	.04

CAL YR 1975 TOTAL 43242.4 MEAN 118 MAX 1460 MIN 2.4 CFSM 1.44 IN 19.62
WTR YR 1976 TOTAL 43327.2 MEAN 118 MAX 1800 MIN 2.2 CFSM 1.44 IN 19.66

05394500 PRAIRIE RIVER NEAR MERRILL, WI

LOCATION.--LAT 45°14'09", LONG 89°38'59", ON LINE BETWEEN SECS.20 AND 29, T.32 N., R.7 E., LINCOLN COUNTY. HYDROLOGIC UNIT 07070002, ON LEFT BANK 40 FT (12 M) UPSTREAM FROM BRIDGE ON COUNTY TRUNK HIGHWAY C, 1.5 MI (2.4 KM) UPSTREAM FROM MEADOW CREEK, 4.5 MI (7.2 KM) NORTHEAST OF MERRILL, AND 8.0 MI (12.9 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--181 MI² (469 KM²).

PERIOD OF RECORD.--JANUARY 1914 TO SEPTEMBER 1931, AUGUST 1939 TO CURRENT YEAR. MONTHLY DISCHARGE ONLY FOR SOME PERIODS, PUBLISHED IN WSP 1308.

REVISED RECORDS.--WSP 1308: 1915-17(M), 1919-21(M), 1923-31(M), 1942-43(M), 1945(M), 1948-50(M). WSP 1558: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 1,300 FT (396 M), FROM TOPOGRAPHIC MAP. PRIOR TO OCT. 9, 1968, NONRECORDING GAGE 40 FT (12 M) DOWNSTREAM AT SAME DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR.

AVERAGE DISCHARGE.--54 YEARS (1914-31, 1939-76), 181 FT³/S (5.126 M³/S), 13.5A IN/YR (345 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 5,800 FT³/S (164 M³/S) AUG. 31, 1941, GAGE HEIGHT, 9.45 FT (2.880 M), FROM FLOOD MARKS, BASED ON RATING CURVE EXTENDED ABOVE 2,200 FT³/S (62.3 M³/S); MINIMUM OBSERVED, 34 FT³/S (0.96 M³/S) OCT. 26, 1947, GAGE HEIGHT, 1.39 FT (0.424 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 1,860 FT³/S (52.7 M³/S) MAR. 30, GAGE HEIGHT, 6.12 FT (1.865 M); MINIMUM, 53 FT³/S (1.50 M³/S) JULY 30, GAGE HEIGHT, 1.86 FT (0.567 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (SHIFTING-CONTROL METHOD USED MAR. 22 TO APR. 6; STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 28 TO FEB. 1.)

1.9	62	4.0	645
2.3	123	5.0	1,170
3.0	285	6.0	1,860

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	108	124	112	110	107	1230	295	144	85	93	88
2	97	107	124	110	102	89	1050	295	136	88	93	91
3	91	103	124	104	110	112	1070	266	123	84	93	91
4	91	102	124	98	117	112	898	234	117	79	85	81
5	90	99	124	100	110	107	805	232	107	76	115	76
6	88	99	122	110	117	99	805	248	102	75	123	78
7	88	100	120	100	108	104	825	237	97	75	107	76
8	88	107	120	98	119	96	771	215	96	74	93	74
9	88	121	118	100	110	107	672	200	95	78	85	72
10	91	342	115	104	119	100	654	198	93	76	90	72
11	91	527	112	105	108	100	704	182	93	74	103	72
12	93	493	110	98	112	99	640	158	96	72	107	71
13	96	403	115	100	110	92	535	152	107	72	107	72
14	96	298	120	100	103	102	460	154	105	71	97	81
15	96	234	126	100	119	102	428	150	102	72	85	79
16	93	193	140	100	125	96	431	467	100	74	84	79
17	93	177	180	100	125	99	519	663	102	72	78	78
18	91	164	170	105	126	105	1170	539	99	71	75	76
19	90	164	160	104	125	109	1620	424	96	72	74	78
20	96	195	150	110	121	125	1310	321	93	100	72	81
21	95	250	132	105	115	260	1030	248	88	96	71	82
22	90	224	140	110	105	410	1130	212	87	87	70	90
23	93	220	135	114	102	560	996	173	85	82	68	87
24	115	186	130	114	110	710	795	166	84	79	67	79
25	203	144	122	114	115	1400	685	154	85	76	67	82
26	205	152	122	114	114	1200	504	150	85	74	74	81
27	164	130	114	110	123	1360	390	142	84	76	81	90
28	140	126	114	114	109	1200	336	128	82	82	76	82
29	128	125	120	110	107	1100	295	125	85	82	78	81
30	117	124	110	112	---	1650	289	134	90	84	75	83
31	112	---	115	115	---	1650	---	148	---	91	75	---
TOTAL	3319	5817	3952	3290	3296	13562	23047	7410	2958	2449	2661	2403
MEAN	107	194	127	106	114	437	768	239	98.6	79.0	85.8	80.1
MAX	205	527	180	115	126	1650	1620	663	144	100	123	91
MIN	88	99	110	98	102	89	289	125	82	71	67	71
CFSM	.59	1.07	.70	.59	.63	2.41	4.24	1.32	.54	.44	.47	.44
IN.	.68	1.20	.81	.68	.68	2.79	4.74	1.52	.61	.50	.55	.49
CAL YR 1975	TOTAL	62412	MEAN 171	MAX 1860	MIN 68	CFSM .94	IN 12.83					
WTR YR 1976	TOTAL	74164	MEAN 203	MAX 1650	MIN 67	CFSM 1.12	IN 15.24					

WISCONSIN RIVER BASIN

05395000 WISCONSIN RIVER AT MERRILL, WI

LOCATION.--LAT 45°10'41", LONG 89°40'52", ON LINE BETWEEN SECS.12 AND 13, T.31 N., R.6 E., LINCOLN COUNTY, HYDROLOGIC UNIT 07070002, ON LEFT BANK 300 FT (91 M) DOWNSTREAM FROM HIGHWAY 51 BRIDGE AT EAST END OF MERRILL, AND 0.5 MI (0.8 KM) DOWNSTREAM FROM PRAIRIE RIVER.

DRAINAGE AREA.--2,780 MI² (7,200 KM²), APPROXIMATELY.

PERIOD OF RECORD.--NOVEMBER 1902 TO CURRENT YEAR.

REVISED RECORDS.--WSP 805: DRAINAGE AREA. WSP 1308: 1904-7, 1909-11, 1913. WSP 1508: 1908, 1915-16(M), 1917, 1920-21(M), 1925(M), 1930, 1935-36.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 1,228.85 FT (374.553 M) ABOVE MEAN SEA LEVEL. PRIOR TO JUNE 18, 1903, NONRECORDING GAGE AT DIFFERENT DATUM. JUNE 18, 1903, TO SEPT. 10, 1914, NONRECORDING GAGE AT PRESENT DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR. FLOW REGULATED BY 20 RESERVOIRS (SEE P. 368) AND 9 POWERPLANTS ABOVE STATION.

AVERAGE DISCHARGE.--73 YEARS, 2,683 FT³/S (75.98 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 49,400 FT³/S (1,400 M³/S) AUG. 31, 1941, GAGE HEIGHT, 18.26 FT (5.566 M) FROM RATING CURVE EXTENDED ABOVE 20,000 FT³/S (566 M³/S); MINIMUM, ABOUT 90 FT³/S (2.55 M³/S) SEPT. 26, 1908, GAGE HEIGHT, 2.45 FT (0.747 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 19,000 FT³/S (538 M³/S) MAR. 30, GAGE HEIGHT, 11.84 FT (3.609 M); MINIMUM DISCHARGE, 704 FT³/S (19.9 M³/S) SEPT. 26, 27, GAGE HEIGHT, 3.66 FT (1.116 M); MINIMUM DAILY, 720 FT³/S (20.4 M³/S) SEPT. 26.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 1-4, 9-15, 17-30, JAN. 3 TO MAR. 16, MAR. 18-29.)

3.6	680	8.0	7,640
4.0	1,040	10.0	12,900
5.0	2,120	12.0	19,600
6.0	3,640		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1740	1430	4100	2510	2200	2600	12800	2680	2370	1780	1280	1530
2	1770	1300	3800	2370	2200	2700	9040	3360	1960	1700	1150	1280
3	1600	1480	3400	2400	2200	2800	9190	4130	2180	1630	1130	1080
4	1600	1610	3000	2200	2100	2600	8860	3250	2300	1630	1300	1060
5	1720	1590	2900	2000	2400	2600	8010	3530	2400	1600	1590	1190
6	1610	1610	3060	2100	2300	2600	6760	3240	2040	1360	1340	1200
7	1680	1480	2920	2000	2300	2700	7640	3220	2100	1500	1280	1140
8	1550	1710	2480	2200	2500	2800	6860	2360	2290	1530	1120	1160
9	1470	1940	2000	2500	2500	2700	5760	2370	1940	1440	1270	1130
10	1450	4130	2100	2600	2500	2500	5800	2690	2020	1450	1530	1150
11	1510	5540	2100	2700	2500	2500	6420	2200	2190	1420	1520	1000
12	1550	7540	2000	2700	2500	2700	5500	2220	2120	1390	1350	890
13	1320	4880	1900	2300	2500	2600	4850	2250	2080	1290	1360	870
14	1390	3190	2700	2100	2600	2500	4400	2100	2110	1320	1310	1000
15	1500	3190	3500	2300	2600	2500	4360	2220	2100	1350	1000	940
16	1470	2790	3300	2300	2700	2500	4180	3460	2120	1300	1200	890
17	1450	2580	3000	2400	2800	2550	4580	4040	1900	1260	1420	860
18	1380	2410	2700	2200	2800	2600	6420	3280	2100	1340	1220	850
19	1440	2680	2300	2300	3000	2600	8890	3190	2270	1220	1360	832
20	1520	2710	2200	2100	2800	3100	7090	2300	2040	1900	1410	890
21	1550	3680	2400	2200	2800	3600	6140	2480	1920	1350	1050	1000
22	1480	3480	2300	2200	2800	3500	7560	2340	1940	1330	1430	980
23	1550	2620	2300	2100	2600	4000	7390	2250	1840	1300	1340	910
24	1780	2550	2500	2400	2600	3900	7660	2070	1820	1250	1250	792
25	1830	2000	2500	2500	2800	4400	5740	2250	1460	1290	1350	744
26	1780	1920	2300	2100	2600	5200	5440	2300	1550	1260	1250	720
27	1820	2120	2200	2200	2800	5800	4430	2340	1630	1260	1280	760
28	1820	2020	2300	2400	2600	6400	4310	2270	1800	1490	1270	808
29	1550	2470	2200	2300	2600	8800	3410	2290	1450	1430	1130	800
30	1500	3440	2300	2000	---	16500	3110	2060	1770	1290	1180	792
31	1470	---	2410	2100	---	15800	---	2340	---	1400	1260	---
TOTAL	48850	82090	81170	70780	74200	130650	192600	83080	59810	44060	39930	29248
MEAN	1576	2736	2618	2263	2559	4215	6280	2680	1994	1421	1288	975
MAX	1830	7540	4100	2700	3000	16500	12800	4130	2400	1900	1590	1530
MIN	1320	1300	1900	2000	2100	2500	3110	2060	1450	1220	1000	720
CAL YR 1975 TOTAL	883800			MEAN 2421	MAX 14000	MIN 1070						
WTR YR 1976 TOTAL	936468			MEAN 2559	MAX 16500	MIN 720						

05397110 EAU CLAIRE RIVER NEAR ANTIGO, WI

LOCATION.--LAT 45°07'32", LONG 89°14'01", IN NE 1/4 SW 1/4 SEC.34, T.30 N., R.10 E., LANGLADE COUNTY, HYDROLOGIC UNIT 07070002, ON LEFT BANK, 50 FT (15 M) DOWNSTREAM FROM BRIDGE ON COUNTY TRUNK HIGHWAY Y, 1.0 MI (1.6 KM) SOUTH OF STATE HIGHWAY 64, 2.4 MI (3.9 KM) DOWNSTREAM FROM CONFLUENCE OF EAST AND WEST BRANCHES OF EAU CLAIRE RIVER, AND 3.5 MI (5.6 KM) WEST OF ANTIGO.

DRAINAGE AREA.--183 MI² (474 KM²).

PERIOD OF RECORD.--OCTOBER 1974 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 1,440 FT (440 M) FROM PLANIMETRIC MAP.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 1,840 FT³/S (52.1 M³/S) APR. 24, 1975, GAGE HEIGHT, 12.36 FT (3.77 M); MINIMUM, 25 FT³/S (0.71 M³/S) SEPT. 13, 1976.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 1,550 FT³/S (43.9 M³/S) MAR. 31, GAGE HEIGHT, 11.66 FT (3.554 M); MINIMUM, 25 FT³/S (0.71 M³/S) SEPT. 13.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(SHIFTING-CONTROL METHOD USED JULY 16 TO SEPT. 16; STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 25 TO MAR. 27.)

6.4	25	10.0	980
7.0	145	11.0	1,300
8.0	395	12.0	1,700
9.0	680		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	53	150	58	52	62	1160	208	93	50	51	54
2	58	48	140	56	52	64	944	206	89	43	47	50
3	51	47	130	56	52	68	974	192	83	41	42	54
4	51	49	120	54	52	70	830	176	75	39	39	46
5	49	49	110	52	52	72	719	171	69	39	67	43
6	49	49	100	50	50	70	715	197	65	39	76	39
7	46	51	90	49	52	68	726	182	61	37	62	37
8	45	51	80	48	54	68	672	160	57	35	55	33
9	47	81	76	47	56	68	577	144	55	35	53	33
10	50	296	72	46	56	68	550	132	53	35	64	32
11	49	403	68	45	54	68	631	122	63	35	68	28
12	49	366	70	45	58	70	577	114	77	32	63	27
13	49	292	74	45	60	72	445	109	77	31	57	27
14	51	215	90	44	62	72	384	110	81	29	57	31
15	52	185	110	44	58	72	379	108	72	31	55	33
16	49	149	120	45	58	70	387	647	69	32	51	33
17	47	132	120	44	58	72	422	1110	68	33	48	35
18	45	121	110	45	56	72	842	786	66	30	41	34
19	45	117	98	48	56	74	1200	421	70	30	43	35
20	43	160	92	50	58	140	1030	297	70	52	43	35
21	44	227	84	50	62	230	753	224	63	54	41	39
22	43	225	76	50	60	360	874	177	59	43	40	35
23	44	200	72	50	56	540	878	145	59	42	35	35
24	60	135	72	52	58	720	644	126	57	41	33	35
25	117	120	70	52	60	1000	509	113	60	41	36	35
26	109	110	68	52	64	900	400	102	59	37	39	35
27	100	96	66	52	64	1000	323	92	53	34	39	37
28	114	90	64	50	64	1110	275	85	51	36	39	37
29	75	94	62	50	64	1200	238	81	50	46	35	37
30	68	140	60	52	---	1340	216	83	50	52	35	35
31	56	---	60	52	---	1510	---	93	---	48	41	---
TOTAL	1810	4351	2774	1533	1658	11370	19274	6913	1974	1202	1495	1099
MEAN	58.4	145	89.5	49.5	57.2	367	642	223	65.8	38.8	48.2	36.6
MAX	117	403	150	58	64	1510	1200	1110	93	54	76	54
MIN	43	47	60	44	50	62	216	81	50	29	33	27
CFSM	.32	.79	.49	.27	.31	2.01	3.51	1.22	.36	.21	.26	.20
IN.	.37	.88	.56	.31	.34	2.31	3.92	1.41	.40	.24	.30	.22
CAL YR 1975	TOTAL	45842	MEAN 126	MAX 1660	MIN 33	CFSM .69	IN 9.32					
WTR YR 1976	TOTAL	55453	MEAN 152	MAX 1510	MIN 27	CFSM .83	IN 11.27					

WISCONSIN RIVER BASIN

05397500 EAU CLAIRE RIVER AT KELLY, WI

LOCATION.--LAT 44°55'06", LONG 89°33'00", ON LINE BETWEEN SECS.9 AND 10, T.28 N., R.8 E., MARATHON COUNTY, HYDROLOGIC UNIT 07070002, ON RIGHT BANK 50 FT (15 M) DOWNSTREAM FROM COUNTY HIGHWAY 55 BRIDGE, 0.7 MI (1.1 KM) NORTHEAST OF KELLY, 1.3 MI (2.1 KM) UPSTREAM FROM BIG SANDY CREEK, 4.5 MI (7.2 KM) UPSTREAM FROM MOUTH, AND 5.0 MI (8.0 KM) SOUTHEAST OF WAUSAU.

DRAINAGE AREA.--375 MI² (971 KM²) REVISED.

PERIOD OF RECORD.--JANUARY 1914 TO NOVEMBER 1926, AUGUST 1939 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1508: 1915, 1916-17(M), 1919-26(M), 1940(M), 1945(M), 1950(M).

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 1,177.88 FT (359.018 M) ABOVE MEAN SEA LEVEL. PRIOR TO SEPT. 17, 1953, NONRECORDING GAGE AT SAME SITE AT OATUM 1.00 FT (0.30 M) HIGHER.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR, AND FOR PERIODS OF NO GAGE-HEIGHT RECORD, DEC. 2 TO JAN. 13, WHICH ARE POOR.

AVERAGE DISCHARGE.--49 YEARS, 250 FT³/S (7.080 M³/S), 10.41 IN/YR (264 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 8,300 FT³/S (235 M³/S) AUG. 21, 1926, GAGE HEIGHT, 8.4 FT (2.56 M) FROM GRAPH BASED ON GAGE READINGS, FROM RATING CURVE EXTENDED ABOVE 6,000 FT³/S (170 M³/S); MINIMUM OBSERVED, 8 FT³/S (0.23 M³/S) JULY 17, 1944, GAGE HEIGHT, 0.17 FT (0.052 M), PROBABLY RESULT OF TEMPORARY REGULATION.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE 1,500 FT³/S (42 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)	DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)
MAR. 25	1200	3,900	110	MAY 17	0200	1,630	46.2 4.33 1.320
APR. 18	0800	3,420	96.9				

A ICE JAM.

MINIMUM DISCHARGE, 54 FT³/S (1.53 M³/S) SEPT. 13-14.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 24 TO MAR. 25.)

.8	52	3.0	850
1.0	70	4.0	1,420
1.3	118	6.0	2,920
1.6	218	8.0	4,800
2.0	370		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	95	260	98	92	110	2650	353	157	77	74	67
2	81	90	260	96	92	120	1840	345	148	76	75	75
3	84	88	250	94	92	120	1510	326	138	73	70	71
4	84	85	230	92	92	120	1350	298	127	70	68	70
5	84	85	210	90	92	130	1080	283	118	70	75	67
6	82	68	190	88	90	120	951	322	111	69	82	64
7	81	90	170	86	90	120	911	310	106	66	85	62
8	80	92	150	84	90	120	858	276	100	66	77	61
9	81	100	130	84	94	120	764	250	97	65	71	61
10	85	362	120	82	94	120	693	232	95	65	76	59
11	85	442	110	82	94	120	765	213	92	64	77	59
12	90	465	110	80	94	130	764	196	99	63	81	59
13	92	410	140	80	100	130	651	189	113	62	78	58
14	90	334	170	78	100	130	541	193	109	61	78	62
15	92	268	210	78	100	130	493	193	104	61	74	63
16	92	247	220	80	100	130	486	978	97	61	71	64
17	102	210	200	80	100	130	632	1510	95	62	69	62
18	85	204	190	80	100	130	2960	1420	95	60	68	61
19	84	193	170	82	100	140	2380	814	95	61	66	62
20	82	236	160	86	110	150	1850	486	95	87	65	63
21	82	465	150	88	110	430	1450	369	90	85	63	64
22	82	390	140	90	100	800	1410	298	87	77	62	64
23	82	322	130	90	100	1500	1270	254	84	71	61	63
24	93	290	120	90	100	2700	1150	221	84	66	59	62
25	124	240	120	90	100	3900	838	196	85	66	59	62
26	146	210	110	90	110	3290	643	168	87	67	59	62
27	140	190	110	90	110	3580	510	161	81	65	64	64
28	121	170	100	90	110	3090	426	148	78	77	61	65
29	140	160	100	90	110	2770	377	138	77	77	60	66
30	106	210	100	90	---	3110	345	151	78	74	60	66
31	100	---	100	90	---	3160	---	157	---	82	61	---
TOTAL	2940	6839	4930	2688	2866	30770	32550	11448	3022	2150	2149	1908
MEAN	94.8	228	159	86.7	98.8	993	1085	369	101	69.4	69.3	63.6
MAX	146	465	260	98	110	3900	2960	1510	157	87	85	75
MIN	80	65	100	78	90	110	345	138	77	60	59	58
CFSM	.25	.61	.42	.23	.26	2.65	2.89	.98	.27	.19	.18	.17
IN.	.29	.68	.49	.27	.28	3.05	3.23	1.14	.30	.21	.21	.19
CAL YR 1975	TOTAL	78107	MEAN 214	MAX 2860	MIN 49	CFSM .57	IN 7.75					
WTR YR 1976	TOTAL	104260	MEAN 285	MAX 3900	MIN 58	CFSM .76	IN 10.34					

05398000 WISCONSIN RIVER AT ROTHSCHILD, WI

LOCATION.--LAT 44°53'09", LONG 89°38'05", IN SEC.26, T.28 N., R.7 E., MARATHON COUNTY, HYDROLOGIC UNIT 07070002, ON LEFT BANK AT ROTHSCHILD, 0.5 MI (0.8 KM) DOWNSTREAM FROM ROTHSCHILD DAM, 1.7 MI (2.7 KM) NORTH OF BRIDGE ON U.S. HIGHWAY 51, 2.0 MI (3.2 KM) DOWNSTREAM FROM EAU CLAIRE RIVER, AND 5.0 MI (8.0 KM) UPSTREAM FROM BLACK CREEK.

DRAINAGE AREA.--4,000 MI² (10,360 KM²), APPROXIMATELY.

PERIOD OF RECORD.--OCTOBER 1944 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 1,125.86 FT (343.162 M) ABOVE MEAN SEA LEVEL. PRIOR TO OCT. 1, 1975, AT DATUM 10.00 FT (3.048 M) HIGHER. AUXILIARY WATER-STAGE RECORDER IN MOSINEE POND 8 MI (12.9 KM) DOWNSTREAM. PRIOR TO JULY 23, 1964, NONRECORDING AUXILIARY GAGE AT SAME SITE AND DATUM, READ HOURLY.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, OR DISCHARGE BELOW 1,500 FT³/S (42.5 M³/S), WHICH ARE FAIR. FLOW REGULATED BY 20 RESERVOIRS (SEE P. 368) AND 12 POWERPLANTS ABOVE STATION.

AVERAGE DISCHARGE.--32 YEARS, 3,447 FT³/S (97.62 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 49,200 FT³/S (1,390 M³/S) APR. 12, 1965, MAR. 31, 1967, GAGE HEIGHT, 18.46 FT (5.627 M); MINIMUM DAILY, 680 FT³/S (19.3 M³/S) OCT. 17, 1948.

EXTREMES OUTSIDE THE PERIOD OF RECORD.--FLOOD OF SEPT. 1, 1941, REACHED STAGE OF 22.3 FT (6.80 M) FROM TAILWATER DATA AT ROTHSCHILD DAM, DISCHARGE, 75,000 FT³/S (2,120 M³/S) FROM RATING CURVE EXTENDED ABOVE 45,000 FT³/S (1,270 M³/S), BY LOGARITHMIC PLOTTING.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 43,800 FT³/S (1,240 M³/S) MAR. 31, GAGE HEIGHT, 27.37 FT (8.342 M); MINIMUM DAILY, 952 FT³/S (27.0 M³/S) SEPT. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2110	1380	7000	2700	2400	3000	26600	4370	2960	2060	1580	1360
2	2000	1390	5960	2700	2500	3100	17800	5410	2710	1900	1430	1310
3	1920	1670	4630	2600	2500	3100	16100	5370	2580	1850	1390	1160
4	1490	1800	3990	2500	2300	2900	15100	5060	2790	1910	1410	1040
5	1980	1910	4750	2300	2400	2900	13000	4820	2670	1650	1760	975
6	2010	1840	4680	2500	2700	2900	11000	4950	2280	1890	1420	1050
7	1600	1910	3940	2400	2300	2700	11600	4550	2470	1550	1550	1280
8	1700	1570	3470	2500	2400	3000	10500	4010	2640	1580	1240	1410
9	1480	2330	3380	2700	2500	3100	9100	3140	2560	1590	1270	1320
10	1630	6040	2820	2600	2500	3000	8240	3550	2180	1330	1910	1250
11	1400	9110	2800	2800	2500	2800	9650	3170	2370	1390	1700	1330
12	1480	9900	2600	2700	2500	3100	8400	2600	2300	1470	1760	1350
13	1550	7420	2700	2600	2600	2700	7570	2860	2150	1470	1710	1320
14	1500	5500	4750	2400	2700	2400	6650	2630	2330	1410	1710	1380
15	1580	4450	8090	2500	3100	2800	6850	2690	2450	1440	1440	1280
16	1570	4120	5610	2600	2900	2800	6330	8500	2620	1350	1120	1200
17	1730	3390	4040	2400	3100	2700	6790	11200	2410	1440	1310	1060
18	1350	3300	3600	2300	3100	2600	15400	7950	2350	1340	1210	1020
19	1270	3410	2900	2500	3100	3570	19700	6530	2590	1490	1070	1130
20	1740	3710	2700	2500	3200	4380	14100	5000	2260	1980	1330	1310
21	1570	5990	2900	2300	3100	9180	12500	3800	1980	2160	1010	1350
22	1610	5710	2800	2600	3100	9210	14500	3490	2250	1440	976	1320
23	1580	4380	3200	2400	3100	8550	13200	3220	2300	1400	1300	1260
24	1960	3970	3400	2500	2900	11300	12600	2850	2200	1360	1060	1170
25	2410	2780	3000	2300	3100	15100	10200	2840	2040	1330	1160	1010
26	2340	2340	2800	2500	3100	15300	8890	2910	1430	1320	1140	952
27	2430	2620	2600	2400	3100	20000	7100	3070	1620	1400	1190	1020
28	2260	2670	2700	2500	3000	18000	6280	3090	2100	1680	1160	999
29	2260	3050	2500	2600	3000	21600	5720	2710	2000	1660	1090	1050
30	1790	6410	2600	2500	---	33300	5250	2390	1900	1550	1050	1030
31	1710	---	2800	2000	---	40000	---	2920	---	1500	1120	---
TOTAL	55010	116070	115710	77400	80800	261090	336720	131650	69490	48890	41576	35696
MEAN	1775	3869	3733	2497	2786	8422	11220	4247	2316	1577	1341	1190
MAX	2430	9900	8090	2800	3200	40000	26600	11200	2960	2160	1910	1410
MIN	1270	1380	2500	2000	2300	2400	5250	2390	1430	1320	976	952
CAL YR 1975	TOTAL	1300570	MEAN	3563	MAX	27100	MIN	1270				
WTR YR 1976	TOTAL	1370102	MEAN	3743	MAX	40000	MIN	952				

WISCONSIN RIVER BASIN

05399500 BIG EAU PLEINE RIVER NEAR STRATFORD, WI

LOCATION.--LAT 44°49'19", LONG 90°04'46", ON LINE BETWEEN SEC.13, T.27 N., R.3 E., AND SEC.18, T.27 N., R.4 E., MARATHON COUNTY, HYDROLOGIC UNIT 03070002, ON LEFT BANK 15 FT (4.6 M) UPSTREAM FROM BRIDGE ON STATE HIGHWAY 97, 1.0 MI (1.6 KM) NORTH OF STRATFORD, AND 1.4 MI (2.3 KM) DOWNSTREAM FROM SMALL TRIBUTARY.

DRAINAGE AREA.--224 MI² (580 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--JULY 1914 TO DECEMBER 1925, APRIL 1937 TO CURRENT YEAR. MONTHLY DISCHARGE ONLY FOR SOME PERIODS, PUBLISHED IN WSP 1308.

REVISED RECORDS.--WSP 1308: 1917, 1920-22, 1926, 1946, 1948, 1950. WSP 1508: 1915-25(M), 1937, 1946(M), 1948(M).

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 1,154.24 FT (351.812 M) ABOVE MEAN SEA LEVEL. JULY 24, 1914, TO DEC. 31, 1925, NONRECORDING GAGE AT SITE 0.5 MI (0.8 KM) UPSTREAM AT DIFFERENT DATUM. APR. 30, 1937, TO SEPT. 15, 1938, NONRECORDING GAGE AT PRESENT SITE AND DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR.

AVERAGE DISCHARGE.--50 YEARS (1914-25, 1937-76), 172 FT³/S (4.871 M³/S), 10.43 IN/YR (265 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 41,000 FT³/S (1,160 M³/S) SEPT. 9, 1938, GAGE HEIGHT, 24.5 FT (7.47 M), FROM FLOODMARKS, BASED ON RATING CURVE EXTENDED ABOVE 24,000 FT³/S (680 M³/S); NO FLOW AUG. 17, 1947, JAN. 22 TO FEB. 5, 1961.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--FLOOD OF JUNE 5, 1914, REACHED A STAGE OF 20.7 FT (6.31 M), FROM FLOODMARKS; DISCHARGE, 40,000 FT³/S (1,130 M³/S), FORMER SITE AND DATUM.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 2,500 FT³/S (71 M³/S) AND MAXIMUM (#)

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)	DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)
MAR. 24	----	4,300 122	ICE JAM	MAR. 30	1115	*9,470 268	*16.01 4.880

MINIMUM DISCHARGE, 0.15 FT³/S (0.004 M³/S) AUG. 27.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (RATE OF CHANGE IN STAGE USED AS FACTOR NOV. 10, MAR. 29-31, APR. 19, 24-25; STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 25 TO MAR. 27.)

2.2	0	4.0	175
2.3	1.5	5.0	410
2.4	3.5	6.0	690
2.5	7.0	8.0	1,500
2.7	17.0	10.0	2,690
3.0	38	12.0	4,400
3.5	88	15.0	7,900

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	17	470	35	13	80	1030	123	18	2.9	19	1.9
2	17	16	300	31	13	86	740	123	16	2.7	15	1.5
3	17	16	180	27	13	80	681	101	16	2.5	10	1.9
4	16	15	110	24	13	70	497	77	13	2.3	7.5	2.7
5	15	14	94	20	13	66	391	67	12	2.1	7.5	2.3
6	13	14	80	18	13	56	363	73	9.9	1.9	6.6	1.7
7	13	14	68	16	13	48	312	65	8.5	1.9	5.6	1.4
8	13	14	58	15	13	40	254	56	7.6	1.5	4.9	1.2
9	14	26	50	14	13	37	199	50	6.8	1.2	4.2	1.0
10	14	1380	42	13	14	33	181	42	6.8	1.2	4.2	.90
11	14	914	39	12	15	32	210	42	6.4	1.4	9.0	.75
12	14	469	37	12	17	32	171	76	5.6	1.0	2.9	.75
13	16	310	34	13	20	33	134	46	6.4	.75	3.5	.75
14	16	195	660	13	19	33	118	32	6.4	.75	4.2	2.1
15	16	125	500	13	33	34	106	30	5.6	1.2	3.1	2.3
16	20	89	350	13	56	35	100	320	5.2	1.0	2.7	2.1
17	13	72	230	13	66	34	386	432	4.9	.75	2.7	11
18	17	61	200	13	80	35	2200	279	5.6	.45	2.7	10
19	12	56	170	13	92	36	1360	160	6.0	1.0	2.7	8.0
20	11	203	150	13	98	500	615	98	6.0	6.3	6.3	5.6
21	11	994	130	13	86	2000	678	67	5.6	14	1.2	4.2
22	11	443	110	13	80	1200	1210	50	4.9	22	.60	3.1
23	11	265	96	13	72	2400	601	39	4.6	20	.75	7.5
24	13	158	100	13	64	4300	1310	32	4.2	12	3.1	8.0
25	15	100	92	13	58	3800	1080	26	4.6	7.5	1.2	7.0
26	20	68	84	13	54	4100	464	22	3.9	6.0	.60	4.9
27	28	54	72	13	60	2800	259	19	3.6	4.2	.30	3.8
28	23	46	60	13	70	1930	173	16	3.4	10	.45	3.1
29	22	43	54	13	74	3200	123	17	3.4	17	.45	2.7
30	19	620	48	13	---	7650	101	17	3.3	14	1.0	2.5
31	18	---	42	13	---	2480	---	18	---	19	1.7	---
TOTAL	491	6811	4710	484	1245	37260	16047	2615	214.2	180.50	135.65	106.65
MEAN	15.8	227	152	15.6	42.9	1202	535	84.4	7.14	5.82	4.38	3.56
MAX	28	1380	660	35	98	7650	2200	432	18	22	19	11
MIN	11	14	34	12	13	32	100	16	3.3	.45	.30	.75
CFSM	.07	1.01	.68	.07	.19	5.37	2.39	.38	.03	.03	.02	.02
IN.	.08	1.13	.78	.08	.21	6.19	2.66	.43	.04	.03	.02	.02

CAL YR 1975 TOTAL 53230.10 MEAN 146 MAX 3130 MIN .36 CFSM .65 IN 8.84
WTR YR 1976 TOTAL 70300.00 MEAN 192 MAX 7650 MIN .30 CFSM .86 IN 11.67

05399500 BIG EAU PLEINE RIVER NEAR STRATFORD, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1954 TO CURRENT YEAR.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 24, 1975	1420	0.0	141	140	May 22, 1976	1230	19.0	48	140
Mar. 16, 1976	1240	0.0	35	240	July 7, 1976	1545	17.0	1.6	280
Mar. 25, 1976	1300	2.5	3,380	95	Aug. 24, 1976	1530	21.0	1.7	200

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
JAN. 1976						MAY. 1976					
13...	1600	--	12	2	.06	16...	1040	--	350	22	21
FEB						16...	1640	--	468	20	25
19...	1200	.0	175	7	3.3	22...	1225	--	48	9	1.2
MAR						24...	1410	--	31	4	.33
16...	1140	.0	35	16	1.5	31...	2025	--	18	6	.29
24...	0750	--	4300	41	476	JUN					
25...	0745	--	3800	8	82	06...	1640	--	9.5	1	.03
25...	1320	2.5	3290	41	364	14...	0735	--	6.3	1	.02
26...	0750	--	4100	33	365	20...	1045	--	6.0	4	.06
26...	1545	--	4100	130	1440	27...	2000	--	3.7	1	.01
27...	0745	--	4010	50	541	JUL					
29...	0740	--	3140	45	382	05...	1920	--	1.9	28	.14
30...	0745	--	8580	278	6440	12...	1120	--	1.0	12	.03
30...	1200	--	9430	260	6620	19...	1910	--	1.4	50	.19
APR						25...	1610	--	6.6	14	.25
05...	1305	--	391	4	4.2	AUG.					
11...	1355	--	220	1	.59	01...	1950	--	19	14	.72
17...	1715	--	450	82	100	09...	0805	--	4.6	4	.05
18...	0800	--	2410	64	416	16...	1915	--	2.7	2	.01
19...	0730	--	1700	25	115	23...	0825	--	.45	6	.01
26...	1950	--	368	10	9.9	24...	1420	--	1.7	10	.05
MAY						30...	1155	--	.30	13	.01
03...	1350	--	99	6	1.6	SEP.					
10...	2015	--	40	6	.65	07...	1125	--	1.4	6	.02
15...	1945	--	29	8	.63	13...	0915	--	.75	46	.09
						26...	1045	--	4.9	24	.32

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
MAR. 1976							
25...	1320	3290	41	364	42	50	56
SUS. SED. FALL DIAM. % FINER THAN							
DATE	.016 MM	.031 MM	.062 MM	.125 MM	.250 MM	.500 MM	
MAR. 1976							
25...		67	82	88	92	95	100

WISCONSIN RIVER BASIN

05399600 BIG EAU PLEINE RIVER NEAR KNOWLTON, WI

LOCATION.--LAT 44°43'52", LONG 89°45'35", IN SE 1/4 SW 1/4 SEC.14, T.26 N., R.6 E., MARATHON COUNTY, HYDROLOGIC UNIT 07070002, 3.0 MI (4.8 KM) NORTHEAST OF DANCY, AT RESERVOIR FLOODGATE, 4.0 MI (6.4 KM) WEST OF KNOWLTON.

DRAINAGE AREA.--363 MI² (940 KM²).

WATER QUALITY RECORDS

PERIOD OF RECORD.--MAY 1974 TO CURRENT YEAR.

REMARKS.--RESERVOIR CONTENTS DATA FOR THIS STATION ON PAGE 368.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE D SEDI- MENT (MG/L)	SUS- PENDE D SEDI- MENT DIS- CHARGE (T/DAY)
OCT , 1975				
13...	1200	240	10	6.5
23...	0945	225	12	7.3
NOV				
04...	1430	215	12	7.0
10...	0900	225	12	7.3
28...	0930	210	6	3.4
DEC				
24...	0930	410	4	4.4
JAN , 1976				
05...	1415	360	1	0.97
12...	1130	568	2	3.1
19...	1515	724	2	3.9
27...	1430	692	1	1.9
FEB				
02...	1350	656	1	1.8
19...	1045	676	2	3.7
23...	1315	588	2	3.2
MAR				
01...	1530	560	8	12
08...	0915	205	13	7.2
15...	1100	52	10	1.4
APR				
05...	1015	750	14	28
12...	1115	250	10	6.7
MAY				
03...	1115	500	8	11
10...	1210	125	5	1.7
17...	1515	740	8	16
JUN				
08...	1030	204	2	1.1
14...	1830	320	4	3.5
28...	1215	310	8	6.7
JUL				
06...	1415	295	2	1.6
13...	1415	465	4	5.0
19...	1400	450	9	11
26...	0900	425	10	11
AUG				
02...	1045	195	7	3.7
04...	1450	380	21	22
05...	1515	195	16	8.4
06...	1650	375	7	7.1
08...	1500	550	5	7.4
09...	1300	370	2	2.0
24...	1500	320	2	1.7
30...	0900	295	5	4.0
SEP				
01...	1615	200	44	24
02...	1330	145	16	6.3
06...	1330	140	11	4.2
13...	0845	140	8	3.0
14...	0830	160	12	5.2
16...	0715	185	10	5.0
20...	1000	180	8	3.9
23...	0200	210	14	7.9
27...	0845	210	14	7.9
28...	0900	80	16	3.5

05400650 LITTLE PLOVER RIVER AT PLOVER, WI

LOCATION.--LAT 44°28'26", LONG 89°31'44", IN SW 1/4 SEC.14, T.23 N., R.8 E., PORTAGE COUNTY, HYDROLOGIC UNIT 07070003, ON RIGHT BANK AT BRIDGE ON TOWN ROAD, 1.0 MI (1.6 KM) NORTHEAST OF PLOVER AND 1.2 MI (1.9 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--19 MI² (49.2 KM²) REVISED, OF WHICH 7.33 MI² (18.98 KM²) PROBABLY IS NONCONTRIBUTING.

PERIOD OF RECORD.--JULY 1959 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER AND PARSHALL FLUME. DATUM OF GAGE IS 1,068.34 FT (325.630 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN DEPARTMENT OF NATURAL RESOURCES). PRIOR TO MAY 1960, NONRECORDING GAGE AT SAME SITE AND DATUM 0.88 FT (0.268 M) LOWER.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR PERIODS OF NO GAGE HEIGHT RECORD, DEC. 9 TO JAN. 13, AND MAR. 20, 21, 24-26, WHICH ARE FAIR.

AVERAGE DISCHARGE.--17 YEARS, 10.61 FT³/S (0.300 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, ABOUT 99 FT³/S (2.80 M³/S) MAR. 7, 1973; MINIMUM, 1.4 FT³/S (0.040 M³/S) NOV. 16, 1974; GAGE HEIGHT, 0.28 FT (0.085 M), RESULT OF TEMPORARY DAM AT FLUME ENTRANCE; MINIMUM DAILY, 4.3 FT³/S (0.12 M³/S) AUG. 19, 1959.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 22 FT³/S (0.62 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)	DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)
A	--	50	1.42	UNKNOWN		APR. 21	2200	25	0.72	1.78	0.543
MAR. 30	1800	25	0.71	1.76	0.536						

A SOMETIME DURING MAR. 20-21

MINIMUM DAILY DISCHARGE, 5.6 FT³/S (0.16 M³/S) SEPT. 10, 11.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).

0.6	4.5	1.5	19
0.9	8.5	2.0	29
1.2	13	2.5	53

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	8.4	11	7.8	7.7	7.7	19	16	12	8.2	6.7	6.5
2	8.5	8.4	11	8.2	9.1	8.2	18	15	12	8.9	6.7	6.4
3	8.8	8.4	10	7.8	7.8	8.5	17	15	12	8.2	6.4	6.4
4	8.8	8.4	10	7.6	7.8	8.2	17	15	12	7.9	6.5	6.0
5	8.8	8.4	10	7.6	7.8	8.5	16	15	11	7.8	6.8	5.7
6	8.7	8.4	10	7.8	7.8	8.1	16	14	11	7.7	6.5	5.7
7	8.5	8.5	10	7.6	8.2	8.2	15	14	11	7.5	6.6	5.9
8	8.7	8.4	10	7.8	7.9	7.9	15	14	11	7.4	6.8	5.7
9	8.9	8.8	10	7.8	7.9	8.2	15	14	11	7.4	6.8	5.7
10	8.8	10	9.8	7.8	8.4	8.2	15	14	11	7.2	7.7	5.6
11	8.7	9.1	9.4	8.0	8.0	7.9	15	14	10	7.1	6.8	5.6
12	8.7	8.9	9.0	8.2	8.4	9.7	14	14	10	6.8	6.6	5.7
13	8.7	8.5	12	8.4	8.0	9.0	14	14	10	6.7	7.8	5.7
14	8.7	8.4	14	8.1	8.2	9.0	14	13	10	6.7	8.7	6.0
15	8.7	8.7	14	7.7	8.8	8.8	14	14	10	6.8	7.9	6.1
16	8.5	8.5	10	8.2	9.6	8.5	14	20	10	6.7	7.5	6.1
17	8.5	8.7	9.0	7.8	9.4	8.5	14	17	9.9	6.5	7.5	6.0
18	8.5	8.5	8.0	7.8	9.0	8.6	18	16	9.9	6.3	6.8	5.9
19	8.5	8.4	8.4	7.9	8.8	9.7	17	15	9.5	7.4	6.7	6.4
20	8.5	10	8.2	7.9	8.4	40	16	15	9.4	12	6.4	6.5
21	8.5	11	8.2	8.1	8.2	27	21	14	9.2	8.5	6.5	6.3
22	8.5	9.7	8.4	7.9	7.9	16	21	14	8.9	7.9	6.6	6.3
23	8.9	9.2	8.2	8.1	7.7	17	17	14	8.9	7.8	6.3	6.3
24	8.8	9.2	8.2	8.4	8.2	22	18	14	8.9	7.4	6.2	6.1
25	8.8	8.9	8.2	8.4	8.4	22	20	13	8.9	7.2	6.2	6.1
26	8.5	8.5	8.2	7.9	8.4	21	17	13	8.5	7.1	6.3	6.4
27	8.5	8.9	7.8	7.7	8.6	21	16	11	8.2	6.8	6.1	6.4
28	8.5	8.8	7.8	8.1	8.5	18	16	13	8.2	11	6.0	6.4
29	8.4	10	8.0	8.2	8.4	18	16	13	8.8	9.2	6.4	6.4
30	8.4	14	8.2	8.1	---	23	16	13	8.7	8.4	7.0	6.3
31	8.4	---	8.0	8.1	---	21	---	13	---	7.9	6.5	---
TOTAL	267.4	272.0	293.0	246.8	241.3	427.4	491	445	299.9	240.4	210.3	182.6
MEAN	8.63	9.07	9.45	7.96	8.32	13.8	16.4	14.4	10.0	7.75	6.78	6.09
MAX	8.9	14	14	8.4	9.6	40	21	20	12	12	8.7	6.5
MIN	8.4	8.4	7.8	7.6	7.7	7.7	14	13	8.2	6.3	6.0	5.6
CAL YR 1975	TOTAL	3537.6	MEAN	9.69	MAX	38	MIN	5.3				
WTR YR 1976	TOTAL	3617.1	MEAN	9.88	MAX	40	MIN	5.6				

WISCONSIN RIVER BASIN

05400800 WISCONSIN RIVER AT WISCONSIN RAPIDS, WI

LOCATION.--LAT 44°22'05", LONG 89°51'30", IN SW 1/4 SEC.24, T.22 N., R.5 E., WOOD COUNTY, HYDROLOGIC UNIT 07070003, AT CENTRALIA POWERPLANT OF NEKOOSA-EDWARDS PAPER, INC., 1.6 MI (2.6 KM) DOWNSTREAM FROM CHICAGO AND NORTHWESTERN RAILWAY BRIDGE IN WISCONSIN RAPIDS.

DRAINAGE AREA.--5,400 MI² (14,000 KM²); APPROXIMATELY.

PERIOD OF RECORD.--MAY 1914 TO MARCH 1950 (PUBLISHED AS "NEAR NEKOOSA"), OCTOBER 1957 TO CURRENT YEAR.

REVISED RECORD.--WSP 1308: 1915(M).

GAGE.--WATER-STAGE RECORDERS ON HEADWATER AND TAILWATER. ELEVATION OF POWERPLANT POND IS 980 FT (299 M) AND DATUM OF POWERPLANT GAGES IS 887.83 FT (270.611 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN VALLEY IMPROVEMENT CO.). MAY 1914 TO MARCH 1950, AT SITE 7.0 MI (11.3 KM) DOWNSTREAM AT DIFFERENT DATUM.

REMARKS.--RECORDS GOOD. DISCHARGE COMPUTED FROM POWERPLANT RECORDS ON BASIS OF LOAD-DISCHARGE RATING OF HYDROELECTRIC UNITS AS DEVELOPED BY GEOLOGICAL SURVEY AND TAINTER-GATE RATINGS AND SPILLWAY RATINGS BASED ON THEORETICAL FORMULAS AND DISCHARGE MEASUREMENTS. FLOW REGULATED BY 21 RESERVOIRS (SEE P. 368) AND MANY POWERPLANTS ABOVE STATION. WATER DIVERTED PERIODICALLY FROM POND OF WISCONSIN RAPIDS POWERPLANT 2.6 MI (4.2 KM) UPSTREAM INTO CRANBERRY CREEK, A TRIBUTARY OF YELLOW RIVER, FOR CRANBERRY CULTURE. PROBABLY MOST OF THE WATER DIVERTED IS LOST BY EVAPORATION AND TRANSPIRATION. THESE DIVERSIONS IN CUBIC FEET PER SECOND, FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976, WERE AS FOLLOWS:

OCT 1	99	NOV 20	32	JUL 2	100	AUG 28	100	SEP 6	100	SEP 15	100	SEP 23	100
2	100	JUN 24	100	3	100	29	100	7	100	16	100	24	100
3	100	25	100	4	100	30	100	8	100	17	100	25	100
4	100	26	100	5	100	31	100	9	100	18	100	26	100
5	100	27	100	6	100	SEP 1	100	10	100	19	100	27	100
6	100	28	100	7	100	2	100	11	100	20	100	28	100
7	4	29	100	8	100	3	100	12	100	21	100	29	100
NOV 18	100	30	100	9	100	4	100	13	100	22	100	30	100
19	100	JUL 1	100	AUG 27	84	5	100	14	100				

AVERAGE DISCHARGE.--54 YEARS (1914-50, 1957-76); 4,944 FT³/S (140.0 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 70,400 FT³/S (1,990 M³/S) SEPT. 12, 1938, GAGE HEIGHT, 19.10 FT (5.822 M), FROM RATING CURVE EXTENDED ABOVE 58,000 FT³/S (1,640 M³/S); MINIMUM, 26 FT³/S (0.74 M³/S) SEPT. 7, 1942; MINIMUM DAILY, 165 FT³/S (4.67 M³/S) AUG. 12, 1934.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 51,300 FT³/S (1,450 M³/S) MAR. 31; MINIMUM DAILY, 1,070 FT³/S (30.3 M³/S) SEPT. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2730	2330	7940	3490	3360	4480	40400	7090	3660	2410	1720	1550
2	2920	2170	6070	3640	3350	4620	28900	7060	3820	2210	1740	1550
3	2770	2700	7180	3530	3480	5000	22900	7070	3690	2200	1890	1480
4	2830	2910	6990	3390	3520	5200	20400	7020	3580	2090	2150	1400
5	2790	2600	6900	3690	3720	5210	17700	6900	3490	2060	1990	1380
6	3310	2420	5850	3710	3630	4750	14700	5720	3480	2460	1760	1380
7	3040	2490	5250	3540	3660	4380	12700	5650	3280	2370	1810	1420
8	2520	2440	5230	3640	3680	4130	13300	5180	3250	2140	1750	1300
9	2230	2520	4550	3550	3750	4260	12000	4830	3620	2200	1710	1230
10	2120	6290	4050	3420	3820	4270	10100	4780	3370	2370	1750	1240
11	2120	9150	3990	3420	4270	4230	11000	4590	2880	2230	1960	1220
12	2170	11000	4130	3680	4540	4360	11000	4150	2700	1960	2090	1150
13	2120	9490	4010	3790	4500	4350	10000	4070	3000	1820	2180	1160
14	2110	7840	5620	3990	3740	4200	9030	3990	3310	1740	2060	1150
15	2290	6030	8400	3990	3360	4290	7940	3990	2670	1820	1760	1160
16	2280	4310	9670	4100	4180	4130	7260	8790	2510	1700	1850	1140
17	2070	4180	6790	3650	4470	4470	8880	15100	2680	1710	1810	1290
18	2000	4360	4960	3420	4560	4760	21800	11700	2910	1780	1990	1130
19	1900	4100	4700	3640	4540	4810	30300	8840	2920	1920	2070	1150
20	2010	4490	4250	3700	4430	7490	26800	7150	2750	2860	2020	1160
21	2060	7050	3250	3770	4500	11700	21300	4910	2830	2180	2040	1150
22	2250	7610	4400	3890	4520	16700	22300	4860	2930	2340	1830	1150
23	2430	6900	3810	4020	4630	15500	22300	4500	2770	2040	1980	1190
24	2390	5440	2870	3750	4720	18600	20500	3820	2650	1860	1870	1100
25	2080	3910	2700	3490	4500	21900	19400	3900	2630	1710	1770	1120
26	2100	3170	3800	3580	4720	23200	16000	3900	2630	1720	1730	1120
27	2270	3410	3820	3690	4620	25200	11600	3910	2540	1700	1710	1090
28	2800	3140	3200	3620	4480	24700	9710	3710	2650	2970	1540	1070
29	2780	3870	3430	3370	4460	27100	8860	3650	2560	2110	1560	1070
30	2880	7900	3500	3300	---	34000	7120	2720	2600	2000	1510	1100
31	2670	---	3520	3350	---	47400	---	2770	---	1880	1480	---
TOTAL	75040	146310	156830	112810	119710	359390	496200	176320	90360	64560	57080	36800
MEAN	2421	4877	5059	3639	4128	11590	16540	5688	3012	2083	1841	1227
MAX	3310	11000	9670	4100	4720	47400	40400	15100	3820	2970	2180	1550
MIN	1900	2170	2700	3300	3350	4130	7120	2720	2510	1700	1480	1070

CAL YR 1975 TOTAL 1646860 MEAN 4512 MAX 29600 MIN 1720
WTR YR 1976 TOTAL 1891410 MEAN 5168 MAX 47400 MIN 1070

05401050 TENMILE CREEK NEAR NEKOOSA, WI

LOCATION.--LAT 44°15'44", LONG 89°48'38", IN NE 1/4 SEC.32, T.21 N., R.6 E., WOOD COUNTY, HYDROLOGIC UNIT 07070003, ON LEFT BANK UPSTREAM FROM BRIDGE ON STATE HIGHWAY 13, 5.8 MI (9.3 KM) SOUTHEAST OF NEKOOSA.

DRAINAGE AREA.--64 MI² (166 KM²), APPROXIMATELY.

PERIOD OF RECORD.--OCCASIONAL LOW-FLOW MEASUREMENTS, WATER YEARS 1962-63. OCTOBER 1963 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 967.39 FT (294.860 M) ABOVE MEAN SEA LEVEL. PRIOR TO MAY 13, 1964, NONRECORDING GAGE AT PRESENT SITE AND DATUM.

REMARKS.--RECORDS GOOD. APPROXIMATELY 40 MI (64 KM) OF DRAINAGE DITCHES AND 22 CHECK DAMS ARE USED TO CONTROL THE WATER TABLE IN THE BASIN. SPRINKLER IRRIGATION FROM GROUND-WATER SOURCES AFFECTS NATURAL FLOW OF CREEK.

AVERAGE DISCHARGE.--13 YEARS, 60.6 FT³/S (1.716 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 411 FT³/S (11.6 M³/S) MAR. 15, 1973, GAGE HEIGHT, 6.47 FT (1.972 M); MINIMUM, 9.5 FT³/S (0.27 M³/S) DEC. 16, 1964.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 164 FT³/S (4.64 M³/S) MAR. 21, GAGE HEIGHT, 5.30 FT (1.615 M); MINIMUM, 22 FT³/S (0.61 M³/S) SEPT. 24-30, GAGE HEIGHT, 3.88 FT (1.183 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).

3.9	22	5.0	124
4.5	68	5.5	196

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	53	77	50	39	63	154	120	74	46	44	25
2	60	52	74	47	38	53	143	118	71	44	43	25
3	60	51	69	45	43	66	134	111	66	42	42	24
4	59	51	72	45	41	63	125	107	66	42	41	24
5	58	50	75	46	43	60	118	104	65	41	42	23
6	58	51	73	46	43	54	114	102	63	40	40	23
7	58	52	70	47	44	58	110	99	62	39	36	23
8	57	51	68	47	43	55	106	96	61	36	37	23
9	57	53	67	47	43	59	102	94	60	38	36	23
10	58	58	66	47	45	58	102	92	59	38	36	23
11	57	58	65	49	48	55	106	88	58	37	35	23
12	56	57	62	50	50	61	101	86	57	35	34	23
13	56	55	64	50	52	66	99	85	57	35	34	23
14	57	53	75	46	50	69	96	84	56	33	34	23
15	57	54	83	45	52	66	95	84	54	34	34	23
16	56	52	75	44	60	66	94	101	54	34	32	23
17	55	51	59	42	66	62	94	105	53	33	32	23
18	55	50	60	42	64	65	105	100	53	31	31	23
19	54	50	60	42	64	69	110	94	52	34	31	24
20	54	54	40	42	62	101	112	89	51	49	30	23
21	54	63	59	42	63	153	124	85	50	42	30	23
22	54	64	58	42	58	142	139	82	49	39	29	23
23	54	60	59	42	57	125	135	80	48	38	27	23
24	54	61	57	42	63	126	136	78	48	36	27	22
25	55	52	57	42	64	126	151	77	47	34	27	22
26	55	51	57	42	66	128	144	75	48	34	27	22
27	54	54	58	41	67	136	130	73	46	34	26	22
28	54	54	58	41	67	130	120	71	46	43	26	22
29	53	60	58	41	66	124	114	70	47	49	26	22
30	52	81	58	39	---	137	113	71	47	48	26	22
31	53	---	52	40	---	157	---	72	---	46	26	---
TOTAL	1736	1656	2005	1373	1561	2753	3534	2793	1670	1206	1023	690
MEAN	56.0	55.2	64.7	44.3	53.8	88.8	118	90.1	55.7	38.9	33.0	23.0
MAX	62	81	83	50	67	157	154	120	74	49	44	25
MIN	52	50	52	39	38	53	94	70	46	31	26	22
CAL YR 1975	TOTAL	21421	MEAN 58.7	MAX 224	MIN 20							
WTR YR 1976	TOTAL	22000	MEAN 60.1	MAX 157	MIN 22							

WISCONSIN RIVER BASIN

05401100 FOURTEENMILE CREEK NEAR NEW ROME, WI

LOCATION.--LAT 44°12'15", LONG 89°48'29", IN S 1/2 SEC.17, T.20 N., R.6 E., ADAMS COUNTY, HYDROLOGIC UNIT 07070003, 50 FT (15 M) ABOVE TWIN CULVERTS ON STATE HIGHWAY 13, AND 2.7 MI (4.3 KM) SOUTHEAST OF NEW ROME.

DRAINAGE AREA.--77 MI² (199 KM²), APPROXIMATELY.

PERIOD OF RECORD.--ANNUAL MAXIMUM AND OCCASIONAL LOW-FLOW MEASUREMENTS, WATER YEARS 1961-64. MARCH 1964 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER AND CREST-STAGE GAGE. ALTITUDE OF GAGE IS 980 FT (300 M), FROM TOPOGRAPHIC MAP. PRIOR TO MAR. 2, 1964, CREST-STAGE GAGE ONLY AT DATUM 7.03 FT (2.143 M) LOWER, AND MAR. 2, 1964, TO AUG. 27, 1964, NONRECORDING GAGE AND CREST-STAGE GAGE.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR PERIODS OF NO GAGE-HEIGHT RECORD MAY 25 TO JULY 7, WHICH ARE FAIR. SOME REGULATION CAUSED BY MANIPULATION OF GATES AT RECREATION DAM 300 FT (91 M) UPSTREAM.

AVERAGE DISCHARGE.--12 YEARS, 44.3 FT³/S (1.255 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 546 FT³/S (15.5 M³/S) MAY 9, 1973, GAGE HEIGHT, 6.05 FT (1.844 M); MINIMUM, 0.65 FT³/S (0.018 M³/S) JAN. 25-27, 1968, GAGE HEIGHT, 1.45 FT (0.442 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 182 FT³/S (5.15 M³/S) APR. 25, GAGE HEIGHT, 4.03 FT (1.228 M); MINIMUM DAILY, 7.4 FT³/S (0.21 M³/S) SEPT. 27.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).

		2.1	7.0			3.0	79						
		2.4	19			4.0	179						
DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976													
MEAN VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	40	44	66	57	17	48	144	100	42	18	13	9.8	
2	38	42	62	57	17	48	88	97	42	18	12	9.4	
3	36	38	46	57	16	48	24	91	40	16	11	9.0	
4	36	38	45	57	15	48	41	83	40	16	11	9.0	
5	35	38	45	57	14	47	99	80	38	14	13	9.0	
6	35	38	47	56	13	47	124	82	36	14	13	9.0	
7	34	38	51	55	12	47	119	78	36	14	13	9.0	
8	34	38	57	51	13	47	111	66	34	14	12	8.6	
9	34	39	59	46	13	47	66	67	34	13	12	8.6	
10	33	40	59	47	14	47	57	67	32	13	12	8.6	
11	32	68	58	43	15	47	42	66	32	13	12	8.6	
12	36	80	57	39	15	48	24	63	30	12	12	8.6	
13	42	79	57	39	16	48	24	59	30	12	12	8.2	
14	37	79	57	41	17	48	24	49	30	12	13	8.2	
15	46	78	58	41	17	48	25	50	28	13	12	8.6	
16	66	79	57	41	18	46	25	72	26	13	11	8.6	
17	61	79	57	40	19	48	26	77	26	12	11	8.6	
18	61	65	57	38	20	48	57	77	26	12	11	8.2	
19	61	17	57	37	22	48	77	74	26	13	11	8.2	
20	60	9.8	57	36	24	48	83	71	24	18	11	8.2	
21	60	11	57	34	25	48	95	68	24	17	11	8.2	
22	60	18	58	33	25	51	109	63	22	15	11	8.2	
23	60	19	58	32	26	74	123	59	22	14	11	7.8	
24	61	19	58	32	26	79	135	56	22	13	10	8.2	
25	61	19	57	30	26	100	162	54	22	13	10	8.6	
26	59	19	56	29	27	109	155	48	20	13	10	9.0	
27	58	26	56	27	29	116	138	48	20	13	10	7.4	
28	56	32	56	24	29	147	124	48	20	15	9.4	7.8	
29	49	46	57	22	36	162	111	48	20	14	9.8	8.6	
30	45	66	57	20	---	161	104	48	18	13	9.8	9.8	
31	45	---	57	19	---	156	---	44	---	14	9.8	---	
TOTAL	1471	1301.8	1736	1237	576	2156	2536	2053	862	434	349.8	257.6	
MEAN	47.5	43.4	56.0	39.9	19.9	69.5	84.5	66.2	28.7	14.0	11.3	8.59	
MAX	66	80	66	57	36	162	162	100	42	18	13	9.8	
MIN	32	9.8	45	19	12	47	24	44	18	12	9.4	7.4	
CAL YR 1975	TOTAL	15437.4	MEAN	42.3	MAX	197	MIN	5.8					
WTR YR 1976	TOTAL	14970.2	MEAN	40.9	MAX	162	MIN	7.4					

05401535 BIG ROCHE A CRI CREEK NEAR ADAMS, WI

LOCATION.--LAT 44°05'52", LONG 89°46'30", IN SW 1/4 SEC.22, T.19 N., R.6 E., ADAMS COUNTY, HYDROLOGIC UNIT 07070003, AT CULVERTS ON BROWN DEER AVENUE, 0.5 MI (0.8 KM) UPSTREAM FROM DRY CREEK, AND 10 MI (16.1 KM) NORTH OF ADAMS.

DRAINAGE AREA.--54 MI² (140 KM²), APPROXIMATELY.

PERIOD OF RECORD.--OCTOBER 1963 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 959.45 FT (292.440 M) ABOVE MEAN SEA LEVEL. PRIOR TO MAY 15, 1964, NONRECORDING GAGE AT SAME SITE AT DATUM 1.71 FT (0.52 M) HIGHER.

REMARKS.--RECORDS GOOD.

AVERAGE DISCHARGE.--13 YEARS, 61.3 FT³/S (1.736 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 623 FT³/S (17.6 M³/S) MAR. 9, 1973, GAGE HEIGHT, 6.82 FT (2.079 M) FROM HIGH-WATER MARK IN WELL; MINIMUM, 21 FT³/S (0.600 M³/S) MAR. 9, 1975, GAGE HEIGHT, 1.58 FT (0.482 M).

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 110 FT³/S (3.1 M³/S) AND MAXIMUM (#):

DATE	TIME	DISCHARGE		GAGE HEIGHT		DATE	TIME	DISCHARGE		GAGE HEIGHT	
		(FT ³ /S)	(M ³ /S)	(FT)	(M)			(FT ³ /S)	(M ³ /S)	(FT)	(M)
MAR. 21	0900	153	4.33	4.36	1.329	APR. 26	0600	*159	4.50	*4.39	1.338
MAR. 31	2400	145	4.11	4.26	1.298						

MINIMUM DAILY DISCHARGE, 29 FT³/S (0.82 M³/S) SEPT. 30.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(SHIFTING-CONTROL METHOD USED SEPT. 20-30.)

1.7	26	3.8	122
2.8	71	5.0	210

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	57	79	55	46	65	144	108	68	46	42	32
2	71	57	69	55	53	61	135	106	65	44	40	32
3	70	57	68	52	48	65	123	101	62	43	39	32
4	69	56	68	46	49	62	114	96	60	42	38	31
5	68	56	69	56	49	62	109	94	59	41	40	31
6	67	56	70	53	49	55	104	93	58	40	40	32
7	67	56	64	54	49	64	99	90	57	40	38	31
8	66	56	64	52	48	55	94	86	56	39	37	31
9	66	56	64	50	47	61	91	84	54	39	36	31
10	66	64	63	50	49	57	91	82	53	38	37	32
11	65	62	62	50	52	56	102	79	53	38	38	32
12	65	60	61	50	53	62	98	77	52	37	39	31
13	64	58	61	52	55	73	92	76	54	37	38	30
14	65	56	72	51	52	69	89	76	54	36	38	30
15	67	56	76	50	56	65	88	76	52	36	37	32
16	64	56	66	48	68	65	88	95	50	38	36	32
17	63	56	52	54	68	60	88	107	50	36	35	32
18	62	55	61	51	66	64	97	102	50	36	35	31
19	62	54	59	50	64	67	116	90	50	36	34	30
20	62	57	59	49	62	105	118	84	48	47	33	32
21	61	66	59	49	62	149	123	80	47	51	33	31
22	61	63	58	49	60	134	140	76	46	42	33	30
23	61	59	58	48	55	124	144	74	46	40	32	30
24	61	58	58	50	65	113	136	73	46	39	32	30
25	63	56	58	50	62	114	147	71	47	38	32	31
26	61	49	58	49	63	112	157	70	49	37	32	31
27	60	59	51	51	66	117	141	69	47	37	32	30
28	59	59	56	50	67	116	124	66	44	48	31	30
29	58	59	57	48	66	111	115	65	47	53	31	30
30	57	83	55	49	---	118	110	67	55	44	32	29
31	58	---	55	50	---	139	---	69	---	44	32	---
TOTAL	1983	1752	1930	1571	1649	2640	3417	2582	1579	1262	1102	929
MEAN	64.0	58.4	62.3	50.7	56.9	85.2	114	83.3	52.6	40.7	35.5	31.0
MAX	74	83	79	56	68	149	157	108	68	53	42	32
MIN	57	49	51	40	46	55	88	65	44	36	31	29
CAL YR 1975	TOTAL	23351	MEAN 64.0	MAX 237	MIN 33							
WTR YR 1976	TOTAL	22396	MEAN 61.2	MAX 157	MIN 29							

WISCONSIN RIVER BASIN

05402000 YELLOW RIVER AT BABCOCK, WI

LOCATION.--LAT 44°18'05", LONG 90°07'15", IN NW 1/4 SEC.14, T.21 N., R.3 E., WOOD COUNTY, HYDROLOGIC UNIT 07070003, ON RIGHT BANK AT DOWNSTREAM SIDE OF BRIDGE ON STATE HIGHWAY 80 AT BABCOCK, 1.9 MI (3.1 KM) UPSTREAM FROM MEMLOCK CREEK.

DRAINAGE AREA.--223 MI² (578 KM²).

PERIOD OF RECORD.--MARCH 1944 TO CURRENT YEAR.

REVISED RECORD.--WSP 1308: 1944(M), 1946-47(M), 1949(M).

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 954.75 (291.008 M) ABOVE MEAN SEA LEVEL. PRIOR TO OCT. 28, 1948, NONRECORDING GAGE AT SAME SITE AND DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, THOSE FOR PERIOD OF NO GAGE-HEIGHT RECORD MAR. 31 TO APR. 20 WHICH ARE FAIR, AND THOSE FOR SEPT. 3-30, WHICH ARE POOR. THERE IS A LARGE RECREATION DAM ABOUT 5.0 MI (8.0 KM) UPSTREAM.

AVERAGE DISCHARGE.--32 YEARS, 145 FT³/S (4.106 M³/S), 8.83 IN/YR (224 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 11,600 FT³/S (329 M³/S) APR. 2, 1952, GAGE HEIGHT, 17.38 FT (5.297 M); MINIMUM OBSERVED, 1.0 FT³/S (0.028 M³/S) OCT. 1, 1948, GAGE HEIGHT, 1.22 FT (0.372 M).

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 1,200 FT³/S (34 M³/S) AND MAXIMUM RECORDED (*):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)	DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)
MAR. 22	1300	4,180 118	13.07 3.984	APR. 22	0500	2,350 66.6	10.85 3.307
MAR. 31	0700	*4,300 122	A*13.17 4.014	APR. 25	2000	1,960 55.5	10.20 3.109

A MAY HAVE BEEN HIGHER SAME DAY.

MINIMUM DISCHARGE, 3.6 FT³/S (0.10 M³/S) SEPT. 30.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 25 TO MAR. 22; AFFECTED BY BACKWATER FROM BEAVER DAM SEPT. 3-30.)

1.8	2.0	4.5	380
1.9	6.0	6.0	680
2.0	13	9.0	1,400
2.3	40	12.0	3,180
2.8	92	14.0	5,300
3.5	190		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	34	800	22	19	78	2400	103	40	13	53	5.2
2	22	30	600	21	20	86	1400	137	37	11	38	6.0
3	19	28	300	20	20	78	900	127	33	8.3	28	5.6
4	21	25	120	20	20	68	600	110	29	7.7	24	5.6
5	31	23	96	19	20	60	450	98	25	7.4	27	6.0
6	44	22	76	19	20	54	350	91	22	7.2	23	5.6
7	45	23	64	19	20	48	280	83	20	7.3	18	4.8
8	47	24	54	19	20	43	230	74	19	6.0	16	4.4
9	50	25	49	19	20	38	220	66	18	5.5	14	5.2
10	55	85	45	19	20	36	220	60	18	6.5	13	4.8
11	53	454	41	20	21	36	220	56	18	6.2	14	4.8
12	55	397	39	20	21	36	200	51	17	6.5	10	7.4
13	58	337	37	20	21	36	190	45	18	6.8	8.2	13
14	59	147	60	20	21	36	180	43	16	6.0	7.0	17
15	60	125	520	20	22	36	170	41	14	5.5	6.4	15
16	62	109	400	19	24	36	160	101	13	4.7	6.0	12
17	59	58	310	19	54	100	250	697	13	4.5	7.0	10
18	57	52	250	19	68	200	1200	817	13	4.4	8.2	4.4
19	65	48	180	19	78	500	1500	619	13	4.8	8.0	6.0
20	65	46	120	19	92	1000	1100	311	12	14	7.0	10
21	61	178	90	19	84	2000	1370	167	10	16	8.0	8.8
22	57	401	70	19	76	3000	2200	117	8.5	19	10	6.7
23	57	333	56	19	68	2030	1560	87	8.3	21	9.0	6.7
24	60	141	47	19	62	1810	1120	69	8.4	21	5.0	5.2
25	64	100	40	19	58	1900	1360	58	8.7	17	5.6	5.6
26	84	78	36	19	58	1560	1440	49	8.6	12	6.0	5.6
27	94	60	33	19	64	1530	926	42	7.7	9.7	5.6	5.2
28	74	54	30	19	66	1550	478	37	7.2	27	6.0	5.2
29	57	49	27	19	70	1100	354	34	8.4	56	6.7	4.4
30	45	100	26	19	---	2240	183	34	11	79	5.6	3.6
31	37	---	24	19	---	3500	---	35	---	78	6.0	---
TOTAL	1641	3586	4640	601	1227	24825	23211	4459	494.8	499.0	409.3	209.8
MEAN	52.9	120	150	19.4	42.3	801	774	144	16.5	16.1	13.2	6.99
MAX	94	454	800	22	92	3500	2400	817	40	79	53	17
MIN	19	22	24	19	19	36	160	34	7.2	4.4	5.0	3.6
CFSM	.24	.54	.67	.09	.19	3.59	3.47	.65	.07	.07	.06	.03
IN.	.27	.60	.77	.10	.20	4.14	3.87	.74	.08	.08	.07	.03
CAL YR 1975	TOTAL	56909.5	MEAN 156	MAX 5230	MIN 4.1	CFSM .70	IN 9.49					
WTR YR 1976	TOTAL	65802.9	MEAN 180	MAX 3500	MIN 3.6	CFSM .81	IN 10.98					

05403500 LEMONWEIR RIVER AT NEW LISBON, WI.

LOCATION.--LAT 43°52'47", LONG 90°09'40", IN SE 1/4 SEC.8 T.16 N., R.3 E., JUNEAU COUNTY, HYDROLOGIC UNIT 07070003, NEAR CENTER OF SPAN ON DOWNSTREAM SIDE OF BRIDGE ON STATE HIGHWAY 80 IN NEW LISBON, 200 FT (60 M) DOWNSTREAM FROM RECREATION DAM AND 1.2 MI (1.9 KM) UPSTREAM FROM WEBSTER CREEK.

DRAINAGE AREA.--500 MI² (1,300 KM²), APPROXIMATELY.

PERIOD OF RECORD.--MARCH 1944 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1308: 1944(M), 1949-50(M). WSP 172R: DRAINAGE AREA.

GAGE.--NONRECORDING GAGE. DATUM OF GAGE IS 867.05 FT (264.277 M) ABOVE MEAN SEA LEVEL. PRIOR TO MAY 5, 1948, NONRECORDING GAGE AT SITE 100 FT (30 M) DOWNSTREAM AT SAME DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR. OCCASIONAL REGULATION BY DAM 200 FT (60 M) UPSTREAM. WATER DIVERTED PERIODICALLY INTO THE BASIN FROM THE YELLOW AND BLACK RIVER BASINS FOR CRANBERRY CULTURE.

AVERAGE DISCHARGE.--32 YEARS, 367 FT³/S (10.4 M³/S), 9.97 IN/YR (253 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 6,880 FT³/S (195 M³/S) MAY 8, 1960, GAGE HEIGHT, 12.94 FT (3.944 M) FROM GRAPH BASED ON GAGE READINGS; MINIMUM OBSERVED, 29 FT³/S (0.821 M³/S) JUNE 9, 1976, GAGE HEIGHT, 0.47 FT (0.143 M) DURING PERIOD OF DAM REPAIR.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 2,330 FT³/S (66.0 M³/S) APR. 26, GAGE HEIGHT, 9.72 FT (2.963 M); MINIMUM OBSERVED, 29 FT³/S (0.821 M³/S) JUNE 9, GAGE HEIGHT, 0.47 FT (0.143 M) DURING PERIOD OF DAM REPAIR.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(SHIFTING-CONTROL METHOD USED OCT. 15 TO NOV. 11, MAY 31 TO JULY 13, JULY 23 TO SEPT. 30; STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 19 TO FEB. 16.)

0.3	27
1.0	65
2.0	143
3.0	250

4.0	392
6.0	774
8.0	1,410
10.0	2,530

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	206	588	220	190	832	1580	1070	258	113	83	48
2	237	208	542	210	190	810	1720	965	246	108	77	47
3	249	205	549	200	190	731	1690	848	233	100	69	47
4	260	196	610	200	200	695	1540	726	219	92	67	46
5	248	189	640	200	200	588	1350	632	210	90	71	44
6	227	183	608	200	200	506	1160	576	195	88	71	44
7	213	175	608	200	200	450	1050	542	169	84	69	44
8	207	168	602	210	200	464	955	488	126	82	64	44
9	204	167	562	210	200	426	838	462	30	81	61	42
10	202	215	513	210	210	395	708	458	49	77	61	40
11	202	279	461	220	210	373	588	411	91	72	60	40
12	198	342	427	220	220	424	469	343	105	70	63	42
13	206	389	411	220	230	604	411	315	112	66	65	42
14	215	411	427	210	260	798	418	318	116	67	57	42
15	206	406	459	210	300	887	450	308	113	67	62	42
16	195	384	537	210	450	962	485	437	110	71	63	42
17	187	389	582	210	520	895	513	596	104	69	58	42
18	186	394	652	200	432	793	610	793	102	67	59	43
19	186	373	560	200	538	861	717	1060	102	69	58	45
20	184	340	500	200	600	1090	845	1260	99	94	56	48
21	187	384	460	200	656	1220	1260	1080	97	102	55	49
22	185	408	420	200	656	1210	1680	879	94	101	54	48
23	182	408	370	190	592	1180	2040	662	94	90	54	48
24	184	434	330	190	453	1170	2040	522	98	81	51	48
25	197	453	300	190	430	1130	2190	451	97	73	49	49
26	203	403	280	190	434	1160	2320	395	96	69	52	50
27	213	416	270	190	478	1200	2190	343	93	66	54	55
28	213	421	260	200	652	1160	1820	310	91	77	49	55
29	207	402	250	200	808	1100	1510	284	92	86	46	54
30	201	533	240	200	---	1190	1180	265	104	88	45	54
31	202	---	230	200	---	1370	---	272	---	86	45	---
TOTAL	6418	9881	14248	6310	10899	26674	36327	18071	3745	2546	1848	1384
MEAN	207	329	460	204	376	860	1211	583	125	82.1	59.6	46.1
MAX	260	533	652	220	808	1370	2320	1260	258	113	83	55
MIN	182	167	230	190	190	373	411	265	30	66	45	40
CFSM	.41	.66	.92	.41	.75	1.72	2.42	1.17	.25	.16	.12	.09
IN.	.48	.74	1.06	.47	.81	1.98	2.70	1.34	.28	.19	.14	.10
CAL YR 1975 TOTAL	148662		MEAN 407	MAX 3020	MIN 77	CFSM .81	IN 11.06					
WTR YR 1976 TOTAL	138351		MEAN 378	MAX 2320	MIN 30	CFSM .76	IN 10.29					

WISCONSIN RIVER BASIN

05403630 HULBURT CREEK NEAR WISCONSIN DELLS, WI

LOCATION.--LAT 43°37'37", LONG 89°48'36", IN SE 1/4 SW 1/4 SEC.5, T.13 N., R.6 E., SAUK COUNTY, HYDROLOGIC UNIT 07070003, ON LEFT BANK 300 FT (91 M) UPSTREAM FROM HIGHWAY BRIDGE, 2.0 MI (3.2 KM) WEST OF WISCONSIN DELLS, AND 1.6 MI (2.6 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--11.1 MI² (28.7 KM²).

PERIOD OF RECORD.--OCTOBER 1970 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 840 FT (256 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS FAIR EXCEPT WINTER PERIODS, WHICH ARE POOR.

AVERAGE DISCHARGE.--6 YEARS, 5.62 FT³/S (0.159 M³/S), 6.88 IN/YR (175 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 112 FT³/S (3.17 M³/S) MAR. 22, 1975, GAGE HEIGHT, 3.65 FT (1.173 M); MAXIMUM GAGE HEIGHT, 4.37 FT (1.332 M) MAR. 7, 1973; MINIMUM, 1.2 FT³/S (0.034 M³/S) JUNE 3, 1976.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 61 FT³/S (2.294 M³/S) MAR. 19, GAGE HEIGHT, 4.10 FT (1.250 M); NO OTHER PEAK ABOVE BASE OF 30 FT³/S (0.850 M³/S); MINIMUM, 1.2 FT³/S (0.034 M³/S) JUNE 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	3.5	4.6	3.8	4.2	4.6	7.3	6.4	6.0	3.4	4.4	2.6
2	4.4	3.4	4.3	3.9	4.2	4.6	5.6	5.8	3.0	3.4	3.9	2.8
3	4.2	3.3	4.1	3.8	4.1	4.6	5.3	6.4	1.6	3.4	3.5	2.6
4	4.3	3.2	4.2	3.8	4.1	4.9	5.3	5.6	2.3	3.1	3.1	2.7
5	4.2	3.2	4.8	3.8	4.1	4.9	4.7	5.1	2.5	3.4	5.6	2.6
6	3.9	3.3	4.3	3.9	4.0	4.6	4.8	5.2	2.8	3.3	4.0	2.5
7	3.9	3.5	4.0	3.9	4.0	4.3	4.6	4.6	2.9	3.4	3.3	2.8
8	3.9	3.4	3.9	3.8	4.0	4.3	4.4	4.6	3.3	3.3	3.4	3.0
9	3.6	4.4	4.0	3.8	4.0	4.1	4.4	4.3	3.3	3.2	3.2	2.8
10	3.8	5.3	4.0	3.8	4.1	4.2	4.6	4.7	3.8	3.2	3.2	2.7
11	4.0	3.8	3.9	3.8	4.1	4.3	5.3	4.3	2.8	3.1	3.3	2.7
12	3.8	3.6	3.9	3.8	4.7	6.5	4.3	3.9	2.6	2.9	3.4	2.9
13	4.7	3.8	4.4	3.9	4.9	6.4	4.4	3.9	2.9	3.1	3.2	3.1
14	3.4	3.6	7.3	3.9	4.1	5.6	4.4	3.9	3.3	3.2	5.4	3.2
15	3.9	3.6	5.1	4.1	10	5.2	8.7	6.3	2.8	4.4	4.2	3.0
16	3.9	3.9	4.7	4.1	9.4	4.7	5.7	14	3.0	4.6	3.4	2.6
17	3.9	3.8	4.0	4.1	5.1	4.6	6.7	7.9	2.9	3.4	3.6	3.0
18	4.0	3.3	3.6	4.1	5.6	4.7	12	4.7	2.9	3.4	3.6	3.2
19	4.3	3.6	3.7	4.2	5.1	22	8.2	4.2	2.7	4.2	3.6	3.4
20	3.9	3.8	3.6	4.3	4.7	49	6.0	4.2	2.6	5.6	3.4	3.8
21	3.8	4.6	3.6	4.4	4.9	20	15	4.1	2.7	4.8	3.4	2.9
22	4.1	4.0	3.6	4.2	4.8	13	9.0	4.1	2.7	4.2	3.0	3.0
23	4.2	3.9	3.6	4.1	4.7	11	6.7	4.2	3.0	4.3	2.8	3.1
24	3.9	3.8	3.6	4.0	4.8	8.4	15	4.3	3.5	4.1	2.9	3.1
25	4.0	3.9	3.8	4.1	5.1	6.1	8.6	3.6	3.3	3.9	3.1	3.0
26	3.8	3.8	3.6	4.2	5.6	8.5	7.7	3.2	2.7	4.3	3.4	3.2
27	3.9	4.0	3.6	4.4	5.2	13	6.8	3.2	2.9	4.6	3.4	2.9
28	3.5	4.1	3.5	4.7	4.9	5.8	6.0	3.1	3.1	9.0	2.6	2.9
29	3.3	6.7	3.5	4.4	5.1	6.1	6.1	3.1	4.7	6.5	2.3	2.8
30	3.4	11	3.8	4.2	---	7.6	6.0	3.0	4.3	4.4	2.8	3.0
31	3.6	---	3.6	4.2	---	8.8	---	4.6	---	5.4	3.1	---
TOTAL	122.1	123.1	126.2	125.5	143.6	266.4	203.6	150.7	92.9	126.5	107.5	88.3
MEAN	3.94	4.10	4.07	4.05	4.95	8.59	6.79	4.86	3.10	4.08	3.47	2.94
MAX	4.7	11	7.3	4.7	10	49	15	14	6.0	9.0	5.6	3.8
MIN	3.3	3.2	3.5	3.8	4.0	4.1	4.3	3.0	1.6	2.9	2.3	2.5
CFSM	.35	.37	.37	.36	.45	.77	.61	.44	.28	.37	.31	.26
IN.	.41	.41	.42	.42	.48	.89	.68	.51	.31	.42	.36	.30
CAL YR 1975	TOTAL	1941.7	MEAN	5.32	MAX	78	MIN	2.4	CFSM	.48	IN	6.51
WTR YR 1976	TOTAL	1676.4	MEAN	4.58	MAX	49	MIN	1.6	CFSM	.41	IN	5.62

WISCONSIN RIVER BASIN

05404000 WISCONSIN RIVER NEAR WISCONSIN DELLS, WI

LOCATION.--LAT 43°36'22", LONG 89°45'25", IN NW 1/4 SFC.14, T.13 N., R.6 E., SAUK COUNTY, HYDROLOGIC UNIT 07070003, ON RIGHT BANK 0.5 MI (0.8 KM) DOWNSTREAM FROM DELL CREEK AND 3.0 MI (4.8 KM) DOWNSTREAM FROM WISCONSIN DELLS.

DRAINAGE AREA.--7,830 MI² (20,300 KM²), APPROXIMATELY.

PERIOD OF RECORD.--OCTOBER 1934 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1728: 1936(m), WSP 1914: 1951, 1953-55.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 601.46 FT (244.291 M) ABOVE MEAN SEA LEVEL (LEVELS BY CORPS OF ENGINEERS). PRIOR TO OCT. 1, 1963, WATER-STAGE RECORDER AT SAME SITE AT DATUM 5.00 (1.524 M) HIGHER.

REMARKS.--RECORDS 8000, EXCEPT THOSE FROM OCT. 1 TO MAR. 19, WHICH ARE FAIR. FLOW REGULATED BY 24 RESERVOIRS ABOVE STATION (SEE P.368). IN 1938, WHEN THE MAXIMUM OF RECORD OCCURRED, THERE WERE 22 RESERVOIRS ABOVE STATION, THE TWO LARGE RESERVOIRS, PETENWELL AND CASTLE ROCK, NOT IN EXISTENCE. DIURNAL FLUCTUATION IS CAUSED BY POWERPLANT OF WISCONSIN POWER AND LIGHT CO. AT WISCONSIN DELLS.

AVERAGE DISCHARGE.--42 YEARS, 6,775 FT³/S (191.9 M³/S).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 72,200 FT³/S (2,040 M³/S) SEPT. 14, 1938, GAGE HEIGHT, 23.83 FT (7.263 M), PRESENT DATUM; MINIMUM DAILY, 1,060 FT³/S (30.0 M³/S) AUG. 19, 1936.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 41,000 FT³/S (1,160 M³/S) MAR. 31, GAGE HEIGHT 16.68 FT (5.084 M); MINIMUM DAILY, 1,570 FT³/S (44.5 M³/S) SEPT. 23.

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).

OCT. 1 TO MAR. 30				MAR. 31 TO SEPT. 30			
4.8	2,960	9.0	13,200	3.8	1,550	9.0	13,200
5.0	3,360	12.0	22,400	5.0	3,800	12.0	22,400
7.0	7,880	15.0	33,700	7.0	8,090	16.0	37,900

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5200	3500	7660	6000	5200	9590	40300	13700	4840	3720	3280	2350
2	5000	3200	8900	6200	5000	9570	40400	12100	5730	3600	2940	2330
3	4600	3600	9200	5400	6000	9400	38100	12000	5470	3340	2660	2170
4	4400	3900	9290	4500	6400	9200	34800	10300	5820	3180	2740	2240
5	4000	4100	9300	5400	6800	9200	28100	10200	5530	3080	2840	2330
6	3800	4000	9330	5800	6800	9200	21300	9880	4970	3040	2760	2080
7	4600	4000	9330	5400	6800	9400	17700	9550	4660	3000	2660	1700
8	4300	4000	8450	4600	7000	9400	16400	9650	4520	2940	2740	1650
9	4100	4000	7580	5400	6400	9200	15600	9500	4600	2900	2720	1620
10	3800	4800	7160	5000	5800	9000	15200	8110	4820	2680	2780	1620
11	3700	6260	6620	5200	6000	9000	15200	7560	4860	2720	2660	1670
12	3200	7600	6170	5400	5800	8800	14700	7840	4950	2760	2660	1650
13	3400	12000	5810	5600	6200	8600	12100	7610	4990	2620	3020	1640
14	3300	11300	6070	5800	6600	9000	10500	7090	5450	2740	2720	1670
15	4000	9330	6810	6000	6600	8800	10900	6540	6300	2680	2600	1650
16	4000	8180	8340	6200	5000	8800	11900	6520	6500	2640	2530	1650
17	4300	7010	8980	6000	5400	8800	11300	8160	4860	2600	2580	1620
18	3500	6510	9620	5000	5200	9000	15100	12900	4600	2560	2550	1580
19	3300	6440	9980	5400	6200	9600	28000	13200	4500	2600	2580	1620
20	3400	6420	8540	6000	7000	10500	30100	11100	4120	2680	2560	1580
21	3500	6810	7220	6200	7400	11200	28800	10400	3740	2640	2530	1580
22	3600	8630	6940	6000	7000	11300	29400	10300	4300	2620	2580	1620
23	3700	8030	6610	5600	6000	11300	30700	9210	3960	2600	2550	1570
24	3700	7320	5400	6000	5800	11200	30100	8660	3840	2600	2600	1580
25	3300	6960	5000	5600	7000	13200	30200	8160	3760	2580	2640	1620
26	3100	6520	5200	5400	8400	20000	27900	7220	3720	2580	2550	1580
27	3300	5130	6000	4700	9400	25100	21600	6980	3660	2600	2620	1600
28	3800	4560	5400	5400	9600	27400	17800	6850	3620	3000	2550	1670
29	3800	4580	5200	5600	9770	26100	14000	6760	3560	2980	2490	1690
30	3900	5700	5400	5200	---	31200	15100	6100	3740	3220	2470	1690
31	3900	---	5600	5000	---	38800	---	5330	---	3300	2370	---
TOTAL	119700	184390	227320	171000	192570	410860	673300	279480	140230	88840	82530	52620
MEAN	3861	6146	7333	5516	6640	13250	22440	9015	4674	2866	2662	1754
MAX	5200	12000	9980	6200	9770	38800	40400	13700	6500	3720	3280	2350
MIN	3100	3200	5000	4500	5000	8600	10500	5330	3560	2560	2370	1570

CAL YR 1975 TOTAL 2281570 MEAN 6251 MAX 35800 MIN 2010
WTR YR 1976 TOTAL 2622840 MEAN 7166 MAX 40400 MIN 1570

NOTE.--NO GAGE-HEIGHT RECORD OCT. 1 TO NOV. 10, DEC. 24 TO FEB. 28.

WISCONSIN RIVER BASIN

05405000 BARABOO RIVER NEAR BARABOO, WI

LOCATION.--LAT 43°28'51", LONG 89°38'09", IN NW 1/4 SEC.35, T.12 N., R.7 E., SAUK COUNTY, HYDROLOGIC UNIT 07070004, ON LEFT BANK 50 FT (15 M) DOWNSTREAM FROM HIGHWAY BRIDGE, 0.3 MI (0.5 KM) DOWNSTREAM FROM ROWLEY CREEK AND 5.3 MI (8.5 KM) EAST OF BARABOO.

DRAINAGE AREA.--600 MI² (1,554 KM²).

PERIOD OF RECORD.--DECEMBER 1913 TO MARCH 1922. SEPTEMBER 1942 TO CURRFNT YEAR.

REVISED RECORDS.--WSP 455: 1915. WSP 505: 1917(M). WSP 1438: 1914-15(M), 1916-17, 1918-20(M), 1944(M), 1949(M). WSP 1728: DRAINAGE AREA. WSP 1914: 1948, 1950, 1956. WDR WI-75-1: 1968.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 788.21 FT (240.246 M) ABOVE MEAN SEA LEVEL. DEC. 18, 1913, TO MAR. 31, 1922, NONRECORDING GAGE AT BRIDGE 2.3 MI (3.7 KM) UPSTREAM AT DATUM 7.6 FT (2.32 M) HIGHER. SEPT. 24, 1942, TO JUNE 10, 1963, NONRECORDING GAGE AT PRESENT SITE AND DATUM.

REMARKS.--RECORDS FAIR. DIURNAL FLUCTUATION FROM SEVERAL POWERPLANTS AT BARABOO.

AVERAGE DISCHARGE.--41 YEARS (1914-21, 1942-CURRENT YEAR), 373 FT³/S (10,56 M³/S), 8.44 IN/YR (214 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE OBSERVED, 7,900 FT³/S (224 M³/S) MAR. 26, 1917, GAGE HEIGHT, 17.5 FT (5.33 M), ESTIMATED, SITE AND DATUM THEN IN USE. FROM RATING CURVE EXTENDED ABOVE 6,000 FT³/S (170 M³/S) MINIMUM OBSERVED, 9.0 FT³/S (0.25 M³/S) FEB. 17, 1944, GAGE HEIGHT, 5.08 FT (1.548 M) MINIMUM DAILY, 26 FT³/S (0.74 M³/S) OCT. 6, 1950.

EXTREMES OUTSIDE THE PERIOD OF RECORD.--FLOOD OF AUG. 6, 1935, REACHED A STAGE OF 15.8 FT (4.82 M) FROM FLOODMARKS, SITE AND DATUM IN USE IN 1922, DISCHARGE, 5,100 FT³/S (144 M³/S).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 3,270 FT³/S (92.6 M³/S) MAR. 21, GAGE HEIGHT, 17.88 FT (5.450 M) MINIMUM, 86 FT³/S (2.44 M³/S) SEPT. 8, GAGE HEIGHT, 6.29 FT (1.917 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(SHIFTING-CONTROL METHOD USED FEB. 28 TO MAR. 5, MAR. 12 TO APR. 7, APR. 15 TO MAY 3, MAY 17-20; STAGE-DISCHARGE RELATION AFFECTED BY ICE JAN. 19-26.)

6.5	126	11.0	1,210
7.0	229	14.0	2,080
9.0	710	16.0	3,490

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	192	202	260	180	170	1020	1300	675	235	187	303	153
2	204	202	300	180	160	980	1160	535	247	206	287	163
3	207	208	380	180	160	860	1050	472	245	214	261	163
4	197	210	480	170	160	560	925	441	232	208	235	146
5	190	218	460	170	170	490	725	433	221	170	206	157
6	183	214	350	170	170	417	582	399	215	168	189	155
7	197	214	300	170	170	443	512	374	212	176	164	156
8	197	212	260	180	170	414	453	352	191	170	172	137
9	181	221	250	180	170	376	424	332	204	168	181	155
10	177	244	240	180	180	332	387	311	199	162	166	146
11	181	250	240	180	180	318	385	294	195	170	172	142
12	191	276	240	180	190	575	391	288	194	152	158	138
13	198	312	240	180	200	1160	382	276	198	150	164	138
14	204	285	240	180	210	1430	366	273	204	152	195	139
15	211	244	250	180	250	1370	492	287	210	181	237	144
16	212	229	260	180	400	1350	815	453	217	193	214	146
17	211	225	300	170	560	1300	818	525	203	172	189	141
18	207	221	370	170	450	1180	818	565	199	181	176	147
19	206	223	330	170	520	1460	1040	578	189	191	170	154
20	206	223	300	170	600	2810	1040	505	187	193	166	166
21	204	233	270	170	740	3210	1340	410	176	181	166	158
22	198	235	250	170	680	3110	1470	332	181	191	162	174
23	207	248	230	160	560	2910	1270	298	179	195	160	175
24	208	254	220	160	420	2730	1360	277	181	189	158	167
25	213	250	210	160	380	2220	1550	266	187	185	187	158
26	214	240	200	160	370	1510	1470	259	185	174	290	153
27	228	230	200	160	458	1240	1310	250	189	162	174	159
28	246	230	190	160	645	1030	1200	242	187	187	164	152
29	227	230	190	170	965	958	1100	238	185	279	175	157
30	210	240	180	170	---	1140	922	238	185	276	176	170
31	206	---	180	170	---	1310	---	234	---	250	173	---
TOTAL	6313	7023	8370	5330	10458	40213	27057	11412	6032	5833	5990	4609
MEAN	204	234	270	172	361	1297	902	368	201	188	193	154
MAX	246	312	480	180	965	3210	1550	675	247	279	303	175
MIN	177	202	180	160	160	318	366	234	176	150	158	137
CFSM	.34	.39	.45	.29	.60	2.16	1.50	.61	.34	.31	.32	.26
IN.	.39	.44	.52	.33	.65	2.49	1.68	.71	.37	.36	.37	.29
CAL YR 1975 TOTAL	139773		MEAN 383	MAX 2380	MIN 166	CFSM .64	IN 8.67					
WTR YR 1976 TOTAL	138640		MEAN 379	MAX 3210	MIN 137	CFSM .63	IN 8.60					

NOTE.--NO GAGE-HEIGHT NOV. 26 TO JAN. 18, JAN. 27 TO FEB. 26.

WISCONSIN RIVER BASIN

05406500 BLACK EARTH CREEK AT BLACK EARTH, WI

LOCATION.--LAT 43°09'03", LONG 89°43'56", IN SW 1/4 SEC.25, T.8 N., R.6 E., DANE COUNTY, HYDROLOGIC UNIT 07070005, ON RIGHT BANK, 0.8 MI (1.3 KM) EAST OF BLACK EARTH AND 2.1 MI (3.4 KM) UPSTREAM FROM VERMONT CREEK.

DRAINAGE AREA.--45.6 MI² (118.1 KM²), REVISED, OF WHICH 2.8 MI² (7.2 KM²) PROBABLY IS NONCONTRIBUTING.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--FEBRUARY 1954 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 812.95 FT (247.787 M) ABOVE MEAN SEA LEVEL.

REMARKS.--RECORDS GOOD.

AVERAGE DISCHARGE.--22 YEARS, 31.4 FT³/S (0.889 M³/S), 9.19 IN/YR (233 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 1,750 FT³/S (49.6 M³/S) JULY 3, 1954, GAGE HEIGHT, 6.58 FT (2.006 M); MINIMUM, 4.8 FT³/S (0.14 M³/S) NOV. 29, 1958, GAGE HEIGHT, 1.39 FT (0.424 M), RESULT OF FREEZEUP.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 200 FT³/S (5.66 M³/S) AND MAXIMUM (#):

DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)	DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)
FEB. 28	0200	424	12.0	4.28	1.305	MAR. 12	2100	*834	23.6	*5.47	1.667
MAR. 5	0500	412	11.7	4.23	1.289						

MINIMUM DISCHARGE, 21 FT³/S (0.59 M³/S) SEPT. 4, 6, 13.

RATING TABLE (GAGE HEIGHT, 11 FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND), (SHIFTING-CONTROL METHOD USED) SEPT. 19-30; STAGE-DISCHARGE RELATION AFFECTED BY ICE JAN. 4-6, 8-11.)

1.7	18	3.0	169
2.0	43	4.0	360
2.5	96	5.0	629

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	32	39	30	30	50	49	42	33	28	28	25
2	30	34	36	30	38	41	42	41	33	28	28	24
3	31	36	33	28	33	37	39	40	33	27	28	24
4	30	34	33	27	29	68	39	39	32	27	28	24
5	30	32	34	27	29	254	38	40	32	28	28	24
6	31	32	33	28	29	84	41	40	31	27	28	24
7	31	32	32	28	29	55	37	39	31	26	28	23
8	31	32	32	27	29	49	36	37	32	26	28	23
9	31	33	32	27	29	51	36	37	31	26	27	25
10	31	36	31	28	31	76	36	37	31	26	27	24
11	31	33	31	28	33	107	41	36	31	25	27	24
12	31	32	31	29	38	509	37	36	30	25	27	24
13	32	32	32	29	37	199	34	37	30	25	27	23
14	33	32	38	29	31	85	33	37	30	25	34	24
15	33	32	35	29	45	69	45	41	29	27	28	24
16	32	32	32	30	37	51	43	49	30	27	27	24
17	32	32	29	31	35	45	40	49	30	27	27	24
18	32	31	30	30	47	55	38	41	31	27	27	24
19	33	31	30	29	41	71	36	39	30	27	26	24
20	32	32	29	29	37	60	41	37	30	28	25	25
21	33	33	29	29	37	47	81	37	29	27	25	25
22	32	32	28	29	35	42	78	38	29	27	25	24
23	32	32	29	30	33	40	55	36	30	28	25	23
24	33	32	30	30	35	40	63	36	31	27	24	23
25	34	32	30	30	46	39	78	35	30	27	25	24
26	32	31	30	30	75	42	56	35	29	27	27	24
27	31	32	29	31	185	62	49	34	28	28	26	23
28	32	32	29	30	203	45	44	34	28	33	27	23
29	31	43	29	30	79	44	43	35	29	29	25	23
30	32	67	29	30	---	55	43	35	29	29	25	23
31	31	---	30	29	---	51	---	34	---	29	25	---
TOTAL	981	1018	974	901	1415	2523	1371	1183	912	843	832	715
MEAN	31.6	33.9	31.4	29.1	48.8	81.4	45.7	38.2	30.4	27.2	26.8	23.8
MAX	34	67	39	31	203	509	81	49	33	33	34	25
MIN	30	31	28	27	29	37	33	34	28	25	24	23
CFSM	.69	.74	.69	.64	1.07	1.79	1.00	.84	.67	.60	.59	.52
IN.	.80	.83	.79	.74	1.15	2.06	1.12	.97	.74	.69	.68	.58
CAL YR 1975 TOTAL	15565		MEAN 42.6	MAX 350	MIN 28	CFSM .93	IN 12.70					
WTR YR 1976 TOTAL	13668		MEAN 37.3	MAX 509	MIN 23	CFSM .82	IN 11.15					

05406500 BLACK EARTH CREEK AT BLACK EARTH, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD--WATER YEARS 1954 TO CURRENT YEAR.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	HARDNESS (CA.MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
APR , 1976										
28...	0925	43	560	8.4	8.5	4	12.1	108	300	29
JUL 21...	1300	25	--	--	--	--	12.0	--	290	13

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (MCD3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARRON DIOXIDE (CO2) (MG/L)
APR , 1976										
28...	60	37	4.9	3	.1	1.4	333	0	273	2.1
JUL 21...	60	34	--	--	--	--	337	--	276	--

DATE	DIS-SOLVED SULFIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
APR , 1976										
28...	1.8	9.9	3.4	2.0	301	284	.41	34.9	2.0	.03
JUL 21...	--	17	11	--	317	--	.43	21.4	1.6	.13

DATE	TOTAL NITRATE PLUS NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
APR , 1976									
28...	2.0	.07	.38	.45	2.5	11	.10	.06	5.4
JUL 21...	1.7	.02	.21	.23	1.9	8.5	.18	.16	1.8

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)
APR , 1976								
28...	0925	43	0	1	10	1	10	430

DATE	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR , 1976							
28...	4	100	<.5	0	0	0	10

WISCONSIN RIVER BASIN

05406500 BLACK EARTH CREEK AT BLACK EARTH, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Jan. 19, 1976	1430	1.0	30.1	-	July 13, 1976	1000	16.5	25.4	560
Feb. 20, 1976	1610	5.5	37.9	540	Aug. 13, 1976	1250	19.5	26.1	550
Mar. 26, 1976	1230	11.5	42.2	550	Sept. 17, 1976	1435	14.0	23.3	600
Apr. 28, 1976	1000	8.5	45.6	560					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
FEB. 1976					
27...	0815	--	79	220	47
27...	2005	--	364	21	21
28...	0245	--	412	733	815
28...	1110	--	134	247	89
28...	1700	--	132	320	114
29...	0200	--	115	322	100
MAR					
05...	1630	--	177	127	61
06...	1425	--	71	57	11
11...	1220	--	63	91	15
12...	0705	--	161	178	77
12...	1200	5.5	506	1010	1380
12...	1640	--	786	784	1660
12...	2030	--	829	550	1230
12...	2145	--	819	502	1110
13...	0705	--	161	178	77
17...	1035	--	42	18	2.0
26...	1230	--	42	28	3.2
APR					
21...	0900	--	65	377	66
21...	1025	--	64	195	34
21...	1355	--	64	151	26
21...	1800	--	72	135	26
22...	0500	--	75	165	33
22...	0800	--	75	165	33
23...	0805	--	53	55	7.9
28...	0925	8.5	43	21	2.4
MAY					
21...	0900	--	38	57	5.8
JUN					
03...	1300	--	33	46	4.1
15...	0855	--	29	102	8.0
15...	1230	--	29	76	6.0
15...	1555	--	28	94	7.1
23...	2050	--	30	80	6.5
JUL					
28...	1040	--	37	41	4.1
AUG					
14...	1315	--	36	25	2.4

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL % FINER THAN .002 MM	SUS. SED. FALL % FINER THAN .004 MM	SUS. SED. FALL % FINER THAN .008 MM	SUS. SED. FALL % FINER THAN .016 MM	SUS. SED. FALL % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
MAR. 1976												
12...	1200	506	1010	1380	37	48	62	77	94	98	99	100

05406573 TROUT CREEK AT CONFLUENCE WITH ARNESON CREEK NEAR BARNEVELD, WI

LOCATION.--LAT 43°02'52", LONG 89°56'48", IN SE 1/4 SEC.30, T.7 N., R.5 E., IOWA COUNTY, HYDROLOGIC UNIT 07070005, ON RIGHT BANK, 50 FT (15 M) UPSTREAM FROM OLD BRIDGE, 50 FT (15 M) DOWNSTREAM FROM MOUTH OF ARNESON CREEK, 3.2 MI (5.2 KM) DOWNSTREAM FROM BIRCH LAKE RESERVOIR, AND 3.5 MI (5.6 KM) NORTHWEST OF BARNEVELD.

DRAINAGE AREA.--8.37 MI² (21.7 KM²).

PERIOD OF RECORD.--OCTOBER 1975 TO SEPTEMBER 1976.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 807.18 FT (246.028 M) ABOVE MEAN SEA LEVEL.

REMARKS.--RECORDS GOOD. FLOW PARTLY CONTROLLED BY BIRCH LAKE RESERVOIR 3.2 MI (5.1 KM) UPSTREAM.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE DURING PERIOD OCTOBER 1975 TO SEPTEMBER 1976, 194 FT³/S (5.49 M³/S) MAR. 12, GAGE HEIGHT, 6.05 FT (1.844 M); MINIMUM, 4.0 FT³/S (0.113 M³/S) FEB. 23.

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 26-27, DEC. 28-29.)

OCT. 1 TO MAR. 4				MAR. 5 TO SEPT. 30			
3.2	3.6	3.6	14	3.1	3.3	3.5	14
3.4	7.7	4.0	33	3.3	7.6	4.0	35
		5.0	103			5.0	103

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	7.7	7.7	6.1	6.2	6.6	8.1	8.7	5.2	5.2	5.7	5.2
2	8.2	8.6	7.3	6.2	6.2	6.4	7.9	8.7	5.2	5.2	5.9	5.2
3	8.2	8.6	6.8	5.6	6.2	5.5	7.7	8.1	5.0	5.2	5.7	5.2
4	8.2	7.7	6.6	5.5	5.9	37	7.3	8.1	5.0	5.2	5.7	5.2
5	8.0	7.3	6.6	5.7	5.1	28	6.8	9.0	5.0	5.2	5.9	5.0
6	8.0	7.0	5.9	6.1	5.1	9.0	6.4	9.2	5.0	5.2	5.9	5.0
7	7.8	6.8	6.2	5.9	5.2	7.1	6.2	7.9	5.0	5.4	5.4	5.0
8	7.8	6.8	6.2	5.6	5.0	6.6	5.9	7.9	5.0	5.4	5.4	5.0
9	7.6	7.7	5.9	5.5	5.2	8.7	5.9	7.4	5.0	5.4	5.2	4.8
10	7.6	8.4	6.6	5.7	6.1	17	6.4	7.4	5.0	5.4	5.0	4.8
11	7.4	7.3	6.8	6.1	5.5	22	7.6	7.6	5.0	5.4	5.0	5.0
12	7.4	7.3	6.6	5.9	6.5	81	6.9	7.1	5.0	5.4	5.0	5.0
13	7.4	6.8	6.8	5.7	6.0	17	6.9	7.6	5.2	5.7	5.0	5.0
14	7.8	6.8	6.9	5.5	6.0	10	7.1	7.4	5.2	5.7	5.2	5.2
15	8.8	6.8	6.7	5.7	10	8.1	8.4	7.6	5.0	5.7	5.2	5.4
16	8.0	6.8	6.1	5.5	6.1	7.4	7.9	8.1	4.8	5.7	5.0	5.4
17	7.8	6.8	5.8	5.5	5.9	7.1	8.1	7.9	4.8	5.7	5.0	5.4
18	7.6	7.0	5.7	5.7	8.4	9.5	9.0	7.4	4.8	5.4	5.0	5.7
19	7.6	7.0	6.1	5.9	6.4	12	8.1	7.1	5.0	5.4	5.0	5.9
20	7.8	7.5	5.9	5.9	6.3	10	10	6.2	5.0	5.4	5.0	6.2
21	7.8	7.3	6.0	5.9	6.6	6.6	12	6.2	4.8	5.4	4.8	5.9
22	7.8	6.8	6.0	6.0	5.7	6.4	11	5.9	4.8	5.4	4.8	5.9
23	7.5	7.0	6.0	6.1	5.8	6.6	10	5.9	5.4	5.4	5.0	5.9
24	7.5	7.5	6.0	5.8	6.4	7.1	11	5.7	5.9	5.4	4.8	5.7
25	7.3	6.8	6.3	5.4	8.2	7.1	11	5.7	5.4	5.2	6.6	5.9
26	7.8	6.6	6.1	5.4	16	9.5	10	5.7	5.2	5.4	6.4	5.9
27	7.8	6.8	5.8	5.4	48	12	9.5	5.2	5.0	5.7	5.4	5.9
28	7.5	7.7	5.6	5.8	20	8.6	9.5	5.4	5.2	7.6	5.7	5.9
29	7.5	11	5.6	5.9	9.4	8.7	9.5	5.2	5.4	6.4	5.4	5.9
30	7.8	11	6.2	5.9	---	9.8	9.5	5.4	5.2	5.9	5.2	6.2
31	8.0	---	6.1	6.2	---	10	---	5.4	---	5.7	5.2	---
TOTAL	241.7	225.2	194.9	179.1	249.4	408.4	251.6	218.1	152.5	171.6	165.5	163.7
MEAN	7.80	7.51	6.29	5.78	8.60	13.2	8.39	7.04	5.08	5.54	5.34	5.46
MAX	8.8	11	7.7	6.2	48	81	12	9.2	5.9	7.6	6.6	6.2
MIN	7.3	6.6	5.6	5.4	5.0	5.5	5.9	5.2	4.8	5.2	4.8	4.8
CFSM	.93	.90	.75	.69	1.03	1.58	1.00	.84	.61	.66	.64	.65
IN.	1.07	1.00	.87	.80	1.11	1.81	1.12	.97	.68	.76	.74	.73

WTR YR 1976 TOTAL 2621.9 MEAN 7.16 MAX 81 MIN 4.8 CFSM .86 IN 11.65

NOTE.--NO GAGE-HEIGHT RECORD OCT. 1-20.

WISCONSIN RIVER BASIN

05406574 TROUT CREEK AT TWIN PARKS DAM 8 NEAR BARNEVELD, WI

LOCATION.--LAT 43°03'40", LONG 89°57'01", IN SE 1/4 SW 1/4 SEC.19, T.7 N., R.5 E., IOWA COUNTY, HYDRDLOGIC UNIT 07070005, AT TWIN PARKS WATERSHED DETENTION RESERVOIR SITE NO. 8, 400 FT (122 M) UPSTREAM FROM MOUTH OF DUESLER CREEK, AND 4.2 MI (6.8 KM) NORTHWEST OF BARNEVELD.

DRAINAGE AREA.--9.02 MI² (23.4 KM²).

PERIOD OF RECORD.--OCTOBER 1975 TO SEPTEMBER 1976.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 791.94 FT (241.383 M) ABOVE MEAN SEA LEVEL.

REMARKS.--RECORDS POOR OCT. 1 TO NOV. 18, EXCELLENT NOV. 19 TO MAY 30, GOOD JUNE 1 TO SEPT. 30. DISCHARGE CONTROLLED BY 2.5 FT (0.762 M) CORRUGATED METAL PIPE TO STAGE OF 17.86 FT (5.444 M) WHEN PRINCIPLE SPILLWAY BECOMES EFFECTIVE IN CONTROLLING DISCHARGE. FLOW CONTROLLED BY BIRCH LAKE RESERVOIR 4.51 MI (7.26 KM) UPSTREAM.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE DURING PERIOD OCTOBER 1975 TO SEPTEMBER 1976, 71 FT³/S (2.011 M³/S) MAR. 12; GAGE HEIGHT, 17.65 FT (5.380 M); MINIMUM, 5.8 FT³/S (0.164 M³/S), DEC. 16.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 26-27, JAN. 3-6, 14-16.)

5.9	5.1	9.0	37
6.5	11	13	58
7.0	17	15	64

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	8.4	9.1	6.9	6.7	10	11	11	8.1	6.7	7.0	6.4
2	9.2	9.2	8.4	7.1	6.7	9.9	10	10	7.9	6.7	6.8	6.4
3	9.0	6.6	7.9	6.8	6.9	8.9	10	10	7.8	6.6	6.6	6.4
4	9.0	8.2	7.6	6.6	6.9	22	11	9.9	7.7	6.6	6.6	6.4
5	9.0	8.0	7.7	6.6	7.0	56	10	9.9	7.7	6.6	6.4	6.3
6	8.8	7.8	7.2	6.6	7.1	13	9.2	9.6	7.7	6.7	6.3	6.3
7	8.6	7.6	7.3	6.6	7.2	11	9.0	9.4	7.6	6.8	6.4	6.3
8	8.6	7.4	7.3	6.4	7.0	9.4	8.8	9.4	7.5	6.9	6.6	6.3
9	8.4	8.4	7.3	6.5	7.0	11	8.9	9.3	7.5	6.9	6.8	6.3
10	8.4	9.2	7.3	6.5	7.8	21	9.3	9.3	7.5	6.8	6.4	6.3
11	8.4	7.8	7.3	6.9	7.4	26	9.9	9.2	7.6	7.0	6.0	6.3
12	8.4	7.8	7.2	7.0	8.1	62	9.2	9.2	7.5	7.0	6.2	6.2
13	8.4	7.2	7.6	6.7	7.3	54	9.1	9.5	7.7	7.1	6.2	6.5
14	8.4	7.2	8.2	6.4	7.1	15	9.2	9.3	7.8	7.0	6.9	6.6
15	9.6	7.2	7.6	6.4	12	12	10	9.9	7.4	7.2	6.8	6.7
16	9.0	7.2	7.3	6.6	8.6	11	9.9	10	7.2	6.9	6.5	6.7
17	8.6	7.0	7.1	6.7	8.2	9.6	10	9.9	7.1	6.8	6.2	6.8
18	8.6	7.2	7.2	6.9	11	12	11	9.1	7.2	6.8	6.4	6.7
19	8.6	7.3	7.1	7.1	8.3	14	10	9.0	7.1	6.8	6.3	6.4
20	8.6	7.9	7.0	7.0	8.0	13	12	8.9	6.9	6.8	6.1	6.6
21	8.6	8.2	7.0	6.9	9.2	11	15	8.6	6.9	6.7	6.1	6.6
22	8.8	7.8	7.3	6.9	8.5	10	13	8.5	6.9	6.7	6.2	6.9
23	8.6	8.0	6.8	6.9	7.8	9.8	12	8.4	7.3	6.8	6.3	6.9
24	8.4	7.8	6.8	6.8	8.0	9.6	14	8.4	7.8	6.9	6.3	7.0
25	8.4	7.0	6.9	6.8	9.7	9.1	14	8.4	7.3	6.8	7.6	7.0
26	8.4	6.8	6.9	6.7	18	12	13	8.3	6.9	6.9	7.6	7.1
27	8.4	6.8	6.9	6.7	35	14	12	8.2	6.7	7.0	6.6	7.0
28	8.2	7.3	6.8	6.9	44	11	11	8.3	6.9	9.0	7.0	7.0
29	8.2	13	6.8	6.8	15	11	11	8.3	6.8	7.8	6.5	6.8
30	8.4	13	6.9	6.7	---	13	11	8.3	6.8	7.4	6.4	6.6
31	8.4	---	6.8	6.9	---	11	---	8.2	---	7.2	6.4	---
TOTAL	267.7	242.3	226.6	209.3	311.5	522.3	323.5	283.7	220.8	215.9	202.5	197.8
MEAN	8.64	8.08	7.31	6.75	10.7	16.8	10.8	9.15	7.36	6.96	6.53	6.59
MAX	9.6	13	9.1	7.1	44	62	15	11	8.1	9.0	7.6	7.1
MIN	8.2	6.8	6.8	6.4	6.7	8.9	8.8	8.2	6.7	6.6	6.0	6.2
CF5M	.96	.90	.81	.75	1.19	1.86	1.20	1.01	.82	.77	.72	.73
IN.	1.10	1.00	.93	.86	1.28	2.15	1.33	1.17	.91	.89	.84	.82

WTR YR 1976 TOTAL 3223.9 MEAN 8.81 MAX 62 MIN 6.0 CF5M .98 IN 13.29

NOTE.--NO GAGE-HEIGHT RECORD OCT. 1 TO NOV. 18.

05406575 TROUT CREEK AT COUNTY TRUNK HIGHWAY T NEAR BARNEVELD, WI

LOCATION.--LAT 43°03'52", LONG 89°57'10", IN NW 1/4 SW 1/4 SEC.19, T.7 N., R.5 E., IOWA COUNTY, HYDROLOGIC UNIT 07070005, ON LEFT BANK AT OLD BRIDGE SITE, 400 FT (122 M) UPSTREAM FROM COUNTY TRUNK HIGHWAY T, 0.2 MI (0.3 KM) DOWNSTREAM FROM MOUTH OF DUESLER CREEK, 0.3 MI (0.5 KM) DOWNSTREAM FROM TWIN PARKS DAM 8 (DETENTION RESERVOIR), AND 4.5 MI (7.2 KM) NORTHWEST OF BARNEVELD.

DRAINAGE AREA.--12.1 MI² (31.3 KM²).

PERIOD OF RECORD.--OCTOBER 1975 TO SEPTEMBER 1976.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 765.35 FT (233.279 M) ABOVE MEAN SEA LEVEL.

REMARKS.--RECORDS GOOD. FLOW CONTROLLED BY DETENTION RESERVOIR 0.3 MI (0.5 KM) UPSTREAM ON TROUT CREEK AND BY DETENTION RESERVOIR 1.3 MI (2.1 KM) UPSTREAM ON DUESLER CREEK.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE DURING PERIOD OCTOBER 1975 TO SEPTEMBER 1976, 135 FT³/S (3.823 M³/S) MAR. 12, GAGE HEIGHT, 7.44 FT (2.268 M); MAXIMUM GAGE HEIGHT, 8.41 FT (2.563 M) FEB. 27 (BACKWATER FROM CATTLE GATE); MINIMUM DISCHARGE, 6.6 FT³/S (0.187 M³/S) SEPT. 13, 14.

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CURIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 27.)

OCT. 1 TO FEB. 28				FEB. 28 TO SEPT. 30			
2.9	7.1	5.0	52	2.9	4.9	5.0	62
3.0	9.2	6.0	66	3.0	7.0	6.0	92
4.0	34	7.0	86	4.0	33	7.0	122

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	10	12	9.0	7.7	12	15	14	9.6	8.6	8.6	8.0
2	10	11	11	9.2	7.5	12	14	13	9.5	8.5	6.3	8.1
3	10	10	10	6.7	7.5	8.8	13	13	9.3	8.4	8.2	7.9
4	10	9.3	10	8.2	7.5	33	13	12	9.3	8.4	8.1	7.5
5	10	9.0	11	8.3	7.5	74	12	12	9.4	8.2	8.5	7.4
6	9.8	9.0	10	8.8	7.5	16	12	12	9.4	8.2	8.2	7.3
7	9.8	9.2	10	8.7	7.7	12	11	11	9.4	8.3	8.0	6.9
8	9.8	8.9	10	8.3	7.6	11	11	11	9.4	8.3	7.9	7.0
9	9.8	11	10	8.2	7.6	13	11	11	9.4	8.3	7.8	7.2
10	9.8	12	10	8.2	8.6	27	11	11	9.4	8.3	7.8	7.1
11	9.8	9.7	10	8.3	8.4	36	12	10	9.5	8.0	7.8	7.0
12	9.8	9.5	9.5	8.3	9.2	96	11	10	9.5	7.9	7.9	6.9
13	10	9.3	10	8.2	8.7	66	11	11	9.9	8.1	7.8	6.8
14	10	9.2	10	8.0	8.5	19	10	11	10	8.2	8.8	6.9
15	12	9.3	10	8.2	17	15	12	11	10	8.1	8.3	7.3
16	11	9.3	9.5	8.0	11	13	12	12	9.7	8.3	7.9	7.5
17	11	9.2	9.1	8.0	10	12	12	12	9.6	8.3	7.9	7.4
18	10	9.2	9.1	8.0	14	16	13	11	9.8	8.3	7.8	7.4
19	10	9.3	9.5	8.0	11	19	12	10	9.7	8.4	7.7	8.0
20	10	10	9.6	8.0	9.9	18	15	10	9.3	8.9	7.6	8.3
21	11	10	9.4	8.0	11	14	20	10	9.3	8.7	7.5	7.8
22	11	9.5	9.6	7.8	9.9	12	17	9.9	9.2	8.5	7.5	7.4
23	10	9.4	9.5	7.9	9.3	12	16	9.8	9.5	8.5	7.1	7.2
24	10	9.5	9.5	7.8	9.6	11	18	9.8	10	8.5	7.2	6.8
25	10	8.9	9.6	7.8	11	11	19	9.8	10	8.3	9.2	7.0
26	11	8.9	9.5	7.7	24	14	16	9.6	9.4	8.4	9.9	7.2
27	10	9.0	9.4	7.5	56	19	15	9.7	9.1	8.3	8.6	7.0
28	10	9.0	9.3	7.5	67	14	14	9.7	9.1	11	9.1	7.0
29	10	18	9.3	7.7	18	14	14	9.4	9.1	9.9	8.2	7.0
30	10	18	9.3	7.7	---	18	14	9.7	9.0	9.4	8.1	6.9
31	9.6	---	9.1	7.7	---	16	---	9.6	---	8.9	8.0	---
TOTAL	316.2	303.6	303.8	251.7	400.2	683.8	406	335.0	284.8	264.4	251.3	219.2
MEAN	10.2	10.1	9.80	8.12	13.8	22.1	13.5	10.8	9.49	8.53	8.11	7.31
MAX	12	18	12	9.2	67	96	20	14	10	11	9.9	8.3
MIN	9.6	8.9	9.1	7.5	7.5	8.8	10	9.4	9.0	7.9	7.1	6.8
CF5M	.84	.83	.81	.67	1.14	1.83	1.12	.89	.78	.70	.67	.60
IN.	.97	.93	.93	.77	1.23	2.10	1.25	1.03	.88	.81	.77	.67

WTR YR 1976 TOTAL 4020.0 MEAN 11.0 MAX 96 MIN 6.8 CF5M .91 IN 12.36

NOTE.--NO GAGE-HEIGHT RECORD OCT. 1-27.

WISCONSIN RIVER BASIN

05406577 TROUT CREEK NEAR RIDGEWAY, WI

LOCATION.--LAT 43°04'08", LONG 89°57'57", IN SW 1/4 NE 1/4 SEC.24, T.7 N., R.4 E., IOWA COUNTY, HYDROLOGIC UNIT 07070005, ON RIGHT BANK 100 FT (30 M) UPSTREAM FROM BRIDGE ON COUNTY TRUNK HIGHWAY T, 1.3 MI (2.1 KM) DOWNSTREAM FROM MOUTH OF DUESLER CREEK, 1.4 MI (2.3 KM) DOWNSTREAM FROM TWIN PARKS DAM 8 (DETENTION RESERVOIR), AND 4.8 MI (7.7 KM) NORTH OF RIDGEWAY.

DRAINAGE AREA.--13.5 MI² (35.0 KM²).

PERIOD OF RECORD.--OCTOBER 1975 TO SEPTEMBER 1976.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 752.75 FT (229.438 M) ABOVE MEAN SEA LEVEL.

REMARKS.--RECORDS GOOD. FLOW CONTROLLED BY DETENTION RESERVOIR 1.4 MI (2.3 KM) UPSTREAM AND BY DETENTION RESERVOIR 2.4 MI (3.9 KM) UPSTREAM ON DUESLER CREEK.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE DURING PERIOD OCTOBER 1975 TO SEPTEMBER 1976, 120 FT³/S (3.398 M³/S) MAR. 12, GAGE HEIGHT, 8.58 FT (2.615 M); MINIMUM, 6.9 FT³/S (0.195 M³/S) JAN. 17.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 16-18, JAN. 4, 6-8, 15-17, 27.)

3.8	6.5	5.0	45
4.0	11	6.0	83
4.5	26	7.0	104

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	10	13	9.4	8.7	13	15	16	10	8.5	8.7	8.7
2	14	12	12	9.7	8.7	12	14	16	10	8.5	8.5	8.7
3	13	12	11	9.4	8.7	11	14	15	9.7	8.5	8.3	8.7
4	13	11	11	9.4	8.5	32	14	15	9.5	8.5	8.4	8.5
5	13	10	11	9.0	8.7	79	13	15	9.7	8.5	8.0	8.0
6	13	11	11	9.0	8.7	14	13	15	9.7	8.5	8.0	7.6
7	13	11	11	8.8	8.7	13	13	14	9.7	8.7	8.0	7.6
8	12	10	11	8.6	8.7	12	13	13	9.5	8.5	7.8	7.6
9	12	12	11	8.5	8.7	14	13	13	9.7	8.7	7.8	7.8
10	12	13	10	8.5	10	26	13	13	9.5	8.5	7.8	7.6
11	12	11	10	8.5	9.7	34	14	13	9.5	8.7	7.8	7.6
12	12	11	10	8.5	10	100	13	13	9.5	8.3	8.0	7.4
13	12	11	11	8.0	10	63	13	13	10	8.5	8.0	7.4
14	13	10	12	8.0	9.7	16	13	13	10	8.7	8.7	7.8
15	15	10	11	8.2	16	14	15	13	9.7	8.7	8.3	7.8
16	14	10	10	8.2	11	12	14	14	9.2	8.7	7.8	8.0
17	13	10	10	8.2	11	12	15	13	9.2	8.5	8.0	8.0
18	12	10	10	8.0	14	14	16	12	9.5	8.5	7.8	8.3
19	12	11	10	8.3	12	17	15	12	9.0	9.0	7.6	8.7
20	12	11	10	8.3	11	16	18	12	8.7	9.2	7.6	9.0
21	13	12	9.7	8.0	12	13	23	12	8.7	9.0	7.6	8.3
22	12	11	10	8.3	10	12	19	11	8.7	8.7	7.6	8.3
23	12	11	9.7	8.3	10	12	17	11	9.0	9.0	7.6	7.8
24	12	11	9.7	8.5	11	12	19	11	9.7	8.5	8.0	7.6
25	12	10	9.7	8.5	13	12	21	11	9.5	8.3	9.7	7.8
26	12	10	9.4	8.5	24	15	19	11	8.7	8.7	11	8.0
27	12	11	9.4	8.6	59	19	18	10	8.7	8.5	9.2	8.0
28	12	10	9.4	8.5	55	14	16	11	9.0	12	10	7.8
29	12	18	9.4	8.5	17	14	16	11	9.0	10	9.0	8.0
30	11	19	9.4	8.7	---	18	16	11	9.0	9.5	8.7	8.0
31	10	---	9.4	8.7	---	16	---	10	---	9.2	8.7	---
TOTAL	386	340	321.2	265.6	413.5	681	465	393	281.3	273.6	258.0	240.4
MEAN	12.5	11.3	10.4	8.57	14.3	22.0	15.5	12.7	9.38	8.83	8.32	8.01
MAX	15	19	13	9.7	59	100	23	16	10	12	11	9.0
MIN	10	10	9.4	8.0	8.5	11	13	10	8.7	8.3	7.6	7.4
CFSM	.93	.84	.77	.63	1.06	1.63	1.15	.94	.69	.65	.62	.59
IN.	1.06	.94	.89	.73	1.14	1.88	1.28	1.08	.78	.75	.71	.66

WTR YR 1976 TOTAL 4318.6 MEAN 11.8 MAX 100 MIN 7.4 CFSM .87 IN 11.90

NOTE.--NO GAGE-HEIGHT RECORD OCT. 1-20.

WISCONSIN RIVER BASIN

05407000 WISCONSIN RIVER AT MUSCODA, WI--CONTINUED
(NATIONAL STREAM-QUALITY ACCOUNTING NETWORK STATION)
(NATIONAL PESTICIDE MONITORING NETWORK STATION)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1964-67, 1971, 1975 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: JULY 1975 TO CURRENT YEAR.

WATER TEMPERATURES: JULY 1975 TO CURRENT YEAR.

SUSPENDED-SEDIMENT DISCHARGE: JULY 1975 TO CURRENT YEAR.

REMARKS.--NO TEMPERATURE RECORD DEC. 17, 1975 TO MAR. 17, 1976. SEDIMENT RECORDS ARE FAIR EXCEPT FOR WINTER PERIOD WHICH ARE POOR. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 20 PERCENT OF THE YEAR ARE ESTIMATED.

COOPERATION.--PESTICIDE SAMPLES WERE COLLECTED BY THE U.S. GEOLOGICAL SURVEY AND WERE ANALYZED BY ENVIRONMENTAL PROTECTION AGENCY.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: MAXIMUM DAILY, 290 MICROMHOS DEC. 17, 1975, SEPT. 13, 14, 1976; MINIMUM DAILY, 120

MICROMHOS APR. 24, 1976.

WATER TEMPERATURES (WATER YEAR 1975): MAXIMUM DAILY, 31.0°C AUG. 1, 1975; MINIMUM DAILY, 0.0°C ON MANY DAYS DURING WINTER PERIODS.

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 180 MG/L MAR. 1, 1976; MINIMUM DAILY MEAN, 1 MG/L APR. 25, 27, 1976. MAXIMUM OBSERVED, 214 MG/L MAR. 12, 1976; MINIMUM OBSERVED, 0 MG/L ON SEVERAL DAYS.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 6,320 TONS (5,730 TONNES) MAR. 1, 1976; MINIMUM DAILY, 19 TONS (17 TONNES) SEPT. 25, 1976.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATION: MAXIMUM OBSERVED, 299 MG/L APR. 19, 1965.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: MAXIMUM DAILY, 290 MICROMHOS SEPT. 13, 14; MINIMUM DAILY, 120 MICROMHOS APR. 24.

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 180 MG/L MAR. 1; MINIMUM DAILY MEAN, 1 MG/L APR. 25. MAXIMUM OBSERVED, 214 MG/L MAR. 12; MINIMUM OBSERVED, 0 MG/L ON SEVERAL DAYS.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 6,320 TONS (5,730 TONNES) MAR. 1; MINIMUM DAILY, 19 TONS (17 TONNES) SEPT. 25.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHDS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT 15...	1200	4830	240	8.7	14.0	8	82	43	110	17
NOV 18...	1130	10900	240	7.6	8.5	5	42	74	96	18
DEC 17...	1200	10000	290	7.3	.0	3	59	200	110	24
JAN 29...	1530	5980	285	7.0	.0	3	811	815	100	17
FEB 26...	1100	9200	250	7.3	.0	8	855	94	99	17
MAR 18...	1230	13100	230	7.5	3.0	5	400	270	93	14
APR 13...	1230	19300	355	7.4	11.0	4	85	814	61	13
MAY 04...	1100	14900	370	7.3	10.0	--	--	--	--	--
10...	1130	12900	160	7.0	16.5	10	42	210	70	15
JUN 23...	1100	5190	200	6.8	22.0	7	50	130	92	10
JUL 13...	1500	5270	230	8.8	27.5	2	89	32	100	16
AUG 25...	1400	3140	275	8.6	25.0	5	--	32	110	13
26...	1300	3330	205	8.8	24.5	--	230	--	--	--
SEP 22...	1130	2400	260	8.4	16.5	3	--	17	120	9

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).
E ESTIMATED.

05407000 WISCONSIN RIVER AT MUSCODA, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
OCT , 1975										
15...	24	11	6.3	11	.3	1.6	107	0	88	.3
NOV 18...	22	10	7.0	13	.3	1.6	95	0	78	3.8
DEC 17...	26	11	7.9	13	.3	2.0	105	0	86	8.4
JAN , 1976										
29...	22	11	6.7	12	.3	1.8	102	0	84	16
FEB 26...	23	10	5.8	11	.3	2.7	100	0	82	8.0
MAR 18...	22	9.2	7.3	14	.3	2.2	96	0	79	4.9
APR 13...	15	5.7	3.5	11	.2	2.2	59	0	48	3.8
MAY 04...	--	--	--	--	--	--	--	--	--	--
10...	16	7.2	3.3	9	.2	1.7	66	0	54	11
JUN 23...	22	9.0	4.1	9	.2	1.7	100	0	82	25
JUL 13...	24	10	4.8	9	.2	1.7	104	0	85	.3
AUG 25...	24	12	5.6	10	.2	1.5	117	0	96	.5
26...	--	--	--	--	--	--	--	--	--	--
SEP 22...	28	13	6.0	9	.2	1.6	140	0	115	.9

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS PER AC-FT)	DIS-SOLVED SOLIDS PER DAY)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT , 1975									
15...	16	9.0	.2	.7	114	122	.16	1490	.00
NOV 18...	16	10	.2	1.5	147	115	.20	4330	.22
DEC 17...	16	12	.2	6.0	156	133	.21	4210	.50
JAN , 1976									
29...	17	9.9	.2	9.8	164	129	.22	2650	.78
FEB 26...	16	9.4	.3	9.7	142	126	.19	3530	.73
MAR 18...	14	9.8	.2	9.5	128	122	.17	4530	.65
APR 13...	12	5.6	.1	6.5	93	80	.13	4850	.53
MAY 04...	--	--	--	--	--	--	--	--	--
10...	12	4.7	.2	1.6	100	79	.14	3480	.17
JUN 23...	8.6	7.6	.3	4.2	132	107	.18	1850	.37
JUL 13...	14	6.6	.1	4.6	138	117	.19	1960	.01
AUG 25...	12	6.9	.1	4.9	149	125	.20	1260	.01
26...	--	--	--	--	--	--	--	--	--
SEP 22...	11	8.5	.1	2.0	156	139	.21	1010	.02

WISCONSIN RIVER BASIN

05407000 WISCONSIN RIVER AT MUSCODA, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL KJEL- DAHL- NITRO- GEN (M) (MG/L)	TOTAL NITRO- GEN (M) (MG/L)	TOTAL NITRO- GEN (NO3) (M) (MG/L)	TOTAL PHOS- PHORUS (P) (M) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PERI- PHYTON BIOMASS ASH WEIGHT 6/50 M	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT 6/50 M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M
OCT , 1975									
15...	.86	.86	3.8	.07	11	15.0	21.0	.80	31
NOV									
18...	.70	.92	4.1	.10	--	--	--	--	--
DEC									
17...	.63	1.1	5.0	.07	--	--	--	--	--
JAN , 1976									
29...	.60	1.4	6.1	.07	13	--	--	--	--
FEB									
26...	.89	1.6	7.2	.13	--	--	--	--	--
MAR									
18...	1.5	2.2	9.5	.11	--	--	--	--	--
APR									
13...	.85	1.4	6.1	.08	9.8	--	--	--	--
MAY									
04...	--	--	--	--	--	16.5	18.6	.00	.74
10...	1.0	1.2	5.2	.10	--	--	--	--	--
JUN									
23...	.70	1.1	4.7	.11	--	13.5	16.5	.81	12
JUL									
13...	1.2	1.2	5.4	.12	29	--	--	--	--
AUG									
25...	.95	.96	4.3	.13	--	20.3	28.7	4.5	26
26...	--	--	--	--	--	--	--	--	--
SEP									
22...	.85	.87	3.9	.10	--	--	--	--	--

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDED ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT , 1975												
15...	1200	4830	1	1	0	0	0	0	<10	<10	0	0
JAN , 1976												
29...	1530	5980	0	0	0	1	0	1	<10	0	<10	0
APR												
13...	1230	19300	0	0	0	0	0	0	<10	0	<10	3
JUL												
13...	1500	5270	1	1	0	2	0	2	20	10	10	1

DATE	SUS- PENDED COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDED COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS- PENDED LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)
OCT , 1975											
15...	0	0	11	10	1	1100	350	18	18	0	140
JAN , 1976											
29...	0	0	10	10	0	700	460	2	0	2	40
APR											
13...	0	3	10	10	0	660	260	6	0	6	70
JUL											
13...	0	1	0	0	0	420	120	4	0	4	120

DATE	SUS- PENDED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS- PENDED MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDED SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDED ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT , 1975											
15...	120	20	<.5	.0	<.5	0	0	0	30	20	7
JAN , 1976											
29...	10	30	<.5	.0	<.5	0	0	0	10	0	10
APR											
13...	60	10	<.5	.0	<.5	0	0	0	10	0	10
JUL											
13...	110	10	<.5	.0	<.5	0	0	0	10	0	10

05407000 WISCONSIN RIVER AT MUSCODA, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ATRAZINE (UG/L)	ATRAZINE IN BOTTOM MATERIAL (UG/KG DRY SOLIDS)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)
OCT , 1975										
15...	1200	4830	.00	.0	--	--	.0	0	.00	.0
JAN , 1976										
29...	1530	5980	.00	--	.00	--	.0	--	.00	--
MAY										
10...	1130	12900	.00	.0	.00	.0	.0	0	.00	.0
AUG										
26...	1300	3330	.00	--	.00	--	.0	--	.00	--

DATE	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	DIAZINON IN BOTTOM MATERIAL (UG/KG)	TOTAL DIELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)
OCT , 1975										
15...	.00	.0	.00	.0	.00	.0	.00	2.9	.00	.0
JAN , 1976										
29...	.00	--	.00	--	.00	--	.00	--	.00	--
MAY										
10...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0
AUG										
26...	.00	--	.00	--	.00	--	.00	--	.00	--

DATE	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	TOTAL METHOXYCHLOR (UG/L)
OCT , 1975										
15...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.00
JAN , 1976										
29...	.00	--	.00	--	.00	--	.00	--	.00	.00
MAY										
10...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.00
AUG										
26...	.00	--	.00	--	.00	--	.00	--	.00	.00

DATE	METHOXYCHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL METHYL PARATHION (UG/L)	METHYL PARATHION IN BOTTOM MATERIAL (UG/KG)	TOTAL METHYL TRI-THION (UG/L)	METHYL TRI-THION IN BOTTOM MATERIAL (UG/KG)	TOTAL PARATHION (UG/L)	PARATHION IN BOTTOM MATERIAL (UG/KG)	SIMAZINE TOTAL (UG/L)	SIMAZINE IN BOTTOM MATERIAL (UG/KG DRY SOLIDS)	TOTAL TOXAPHENE (UG/L)
OCT , 1975										
15...	.0	.00	.0	.00	.0	.00	.0	--	--	0
JAN , 1976										
29...	--	.00	--	.00	--	.00	--	--	--	0
MAY										
10...	.0	.00	.0	.00	.0	.00	.0	--	.0	0
AUG										
26...	--	.00	--	.00	--	.00	--	.00	--	0

DATE	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TRI-THION IN BOTTOM MATERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MATERIAL (UG/KG)	TOTAL 2,4,5-T (UG/L)	2,4,5-T IN BOTTOM MATERIAL (UG/KG)	TOTAL SILVEX (UG/L)	SILVEX IN BOTTOM MATERIAL (UG/KG)
OCT , 1975									
15...	0	.00	.0	--	--	--	--	--	--
JAN , 1976									
29...	--	.00	--	.00	--	.00	--	.00	--
MAY									
10...	0	.00	.0	.00	0	.00	0	.00	0
AUG									
26...	--	.00	--	.00	--	.00	--	.00	--

WISCONSIN RIVER BASIN

05407000 WISCONSIN RIVER AT MUSCODA, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method			
Oct. 15, 1975	1200	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		<i>Ankistrodesmus</i>	250	1				
		<i>Pediastrum</i>	2,000	11				
		<i>Quadrigula</i>		0				
		<i>Scenedesmus</i>		0				
		<i>Tetrastrum</i>	1,000	6				
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Asterionella</i>		0				
		<i>Cyclotella</i>	3,500	20				
		<i>Melosira</i>	9,600	54				
		<i>Navicula</i>	760	4				
		<i>Stephanodiscus</i>	760	4				
TOTAL	18,000							
Nov. 18, 1975	1130	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		<i>Dictyosphaerium</i>		0				
		<i>Scenedesmus</i>	530	9				
		<i>Tetrastrum</i>		0				
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Achnanthes</i>	130	2				
		<i>Asterionella</i>		0				
		<i>Cyclotella</i>	1,400	26				
		<i>Cymbella</i>		0				
		<i>Melosira</i>	2,900	51				
		<i>Navicula</i>	260	5				
		<i>Nitzschia</i>		0				
		<i>Stephanodiscus</i>	400	7				
		<i>Synedra</i>		0				
		TOTAL	5,700					
		Dec. 17, 1975	1200	CHLOROPHYTA				Grab sample
				Chlorophyceae				
<i>Scenedesmus</i>	150			8				
CHRYSOPHYTA								
Bacillariophyceae								
<i>Asterionella</i>	110			6				
<i>Cyclotella</i>	130			7				
<i>Diatoma</i>	18			1				
<i>Gomphonema</i>				0				
<i>Melosira</i>	55			3				
<i>Navicula</i>	37			2				
<i>Nitzschia</i>	55			3				
<i>Stauroneis</i>	18			1				
<i>Stephanodiscus</i>				0				
CYANOPHYTA								
Myxophyceae								
<i>Anacystis</i>	520			27				
<i>Oscillatoria</i>	810			42				
EUGLENOPHYTA								
Cryptophyceae								
<i>Cryptomonas</i>	18			1				
TOTAL	1,900							
Jan. 29, 1976	1530			CHLOROPHYTA			Grab sample	
		Chlorophyceae						
		<i>Micractinium</i>	6	1				
		<i>Scenedesmus</i>		0				
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Achnanthes</i>	9	2				
		<i>Asterionella</i>	12	3				
		<i>Caloneis</i>		0				
		<i>Cyclotella</i>	20	5				
		<i>Diatoma</i>	12	3				
		<i>Gomphonema</i>	3	1				
		<i>Melosira</i>	12	3				
		<i>Meridon</i>	3	1				
		<i>Navicula</i>	26	6				
		<i>Nitzschia</i>	6	1				
		<i>Synedra</i>		0				
		CYANOPHYTA						
		Myxophyceae						
		<i>Anacystis</i>	260	62				
<i>Oscillatoria</i>	53	13						
TOTAL	420							

05407000 WISCONSIN RIVER AT MUSCODA, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Feb. 26, 1976	1100	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	81	14	
		<i>Pediastrum</i>		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	16	3	
		<i>Asterionella</i>	81	14	
		<i>Cocconeis</i>	16	3	
		<i>Cyclotella</i>	65	11	
		<i>Cymatopleura</i>		0	
		<i>Diatoma</i>	16	3	
		<i>Fragilaria</i>	16	3	
		<i>Hantzschia</i>		0	
		<i>Melosira</i>	32	6	
		<i>Navicula</i>	150	25	
		<i>Nitzschia</i>	81	14	
		<i>Pinnularia</i>		0	
		<i>Stephanodiscus</i>		0	
		<i>Surirella</i>	16	3	
		<i>Synedra</i>		0	
		CYANOPHYTA			
		Myxophyceae			
		<i>Anacystis</i>		0	
		PYRRHOPHYTA			
		Dinophyceae			
		<i>Glenodinium</i>	16	3	
TOTAL	580				
Mar. 18, 1976	1230	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	41	3	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>		0	
		<i>Asterionella</i>		0	
		<i>Caloneis</i>		0	
		<i>Cocconeis</i>	20	1	
		<i>Cyclotella</i>	41	3	
		<i>Cymbella</i>	20	1	
		<i>Diatoma</i>	20	1	
		<i>Fragilaria</i>		0	
		<i>Gomphonema</i>	41	3	
		<i>Melosira</i>	20	1	
		<i>Navicula</i>	82	6	
		<i>Neidium</i>		0	
		<i>Nitzschia</i>	20	1	
		<i>Stephanodiscus</i>		0	
		<i>Surirella</i>		0	
		<i>Synedra</i>		0	
		CYANOPHYTA			
		Myxophyceae			
		<i>Oscillatoria</i>	1,100	77	
		EUGLENOPHYTA			
		Euglenophyceae			
		<i>Euglena</i>	20	1	
TOTAL	1,400				
Apr. 13, 1976	1230	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	330	2	
		<i>Chlamydomonas</i>	84	1	
		<i>Golenkinia</i>	84	1	
		<i>Micractinium</i>	250	2	
		<i>Pandorina</i>		0	
		<i>Pyramimonas</i>	250	2	
		<i>Westella</i>	330	2	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Asterionella</i>	500	4	
		<i>Cyclotella</i>	4,300	32	
		<i>Diatoma</i>		0	
		<i>Melosira</i>	420	3	
		<i>Navicula</i>		0	
		<i>Nitzschia</i>	250	2	
		<i>Stephanodiscus</i>		0	
		Chrysophyceae			
		<i>Dinobryon</i>	330	2	
		CYANOPHYTA			
		Myxophyceae			
		<i>Anacystis</i>	1,200	9	
		<i>Lyngbya</i>	4,900	37	
		EUGLENOPHYTA			
		Cryptophyceae			
		<i>Chroomonas</i>	84	1	
TOTAL	13,000				

WISCONSIN RIVER BASIN
05407000 WISCONSIN RIVER AT MUSCODA, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method	
May 10, 1976	1130	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Ankistrodesmus</i>	730	3		
		<i>Chlamydomonas</i>		0		
		<i>Chodatella</i>		0		
		<i>Crucigenia</i>	180	1		
		<i>Dictyosphaerium</i>	640	3		
		<i>Golenkinia</i>		0		
		<i>Kirchneriella</i>	180	1		
		<i>Micractinium</i>	180	1		
		<i>Pediastrum</i>	370	1		
		<i>Scenedesmus</i>	1,200	5		
		<i>Tetrastrum</i>	180	1		
		<i>Treubaria</i>		0		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Achnanthes</i>		0		
		<i>Asterionella</i>	180	1		
		<i>Cocconeis</i>		0		
		<i>Cyclotella</i>	3,200	13		
		<i>Diatoma</i>	280	1		
		<i>Melosira</i>	13,000	53		
		<i>Nitzschia</i>	600	2		
		<i>Stephanodiscus</i>		0		
		<i>Tabellaria</i>		0		
		Chrysophyceae				
		<i>Ochromonas</i>		0		
		CYANOPHYTA				
		Myxophyceae				
		<i>Oscillatoria</i>	3,000	12		
		PYRRHOPHYTA				
		Dinophyceae				
<i>Glenodinium</i>		0				
TOTAL		25,000				
June 23, 1976	1100	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Ankistrodesmus</i>		0		
		<i>Coelastrum</i>	1,400	2		
		<i>Gloeoaetinium</i>	1,400	2		
		<i>Golenkinia</i>		0		
		<i>Micractinium</i>	6,900	10		
		<i>Scenedesmus</i>	3,500	5		
		<i>Tetrastrum</i>	690	1		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Cyclotella</i>	3,800	6		
		<i>Melosira</i>	8,300	13		
		<i>Navicula</i>	520	1		
		<i>Nitzschia</i>		0		
		<i>Stauroneis</i>		0		
		CYANOPHYTA				
		Myxophyceae				
		<i>Anacystis</i>	35,000	52		
		<i>Aphanizomenon</i>	4,300	7		
TOTAL		66,000				
July 13, 1976	1500	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Crucigenia</i>		0		
		<i>Scenedesmus</i>	3,100	2		
		<i>Tetraedron</i>		0		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Diatoma</i>		0		
		<i>Melosira</i>	2,500	1		
		<i>Navicula</i>		0		
		<i>Nitzschia</i>		0		
		<i>Stephanodiscus</i>		0		
		CYANOPHYTA				
		Myxophyceae				
		<i>Anacystis</i>	15,000	8		
		<i>Anacystis incerta</i>	5,500	3		
		<i>Aphanizomenon</i>	150,000	85		
		<i>Oscillatoria</i>	1,200	1		
EUGLENOPHYTA						
Cryptophyceae						
<i>Cryptomonas</i>		0				
TOTAL		180,000				

05407000 WISCONSIN RIVER AT MUSCODA, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method	
Aug. 25, 1976	1400	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Ankistrodesmus</i>	1,400	1		
		<i>Dictyosphaerium</i>		0		
		<i>Kirchneriella</i>		0		
		<i>Micractinium</i>		0		
		<i>Oocystis</i>	690	1		
		<i>Pediastrum</i>		0		
		<i>Scenedesmus</i>	2,800	2		
		<i>Schroederia</i>		0		
		<i>Tetrastrum</i>		0		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Cyclotella</i>	4,300	4		
		<i>Melosira</i>	3,900	3		
		<i>Navicula</i>		0		
		<i>Nitzschia</i>	690	1		
		CYANOPHYTA				
		Myxophyceae				
		<i>Agmenellum</i>	2,200	2		
		<i>Anabaena</i>	6,200	5		
		<i>Anacystis</i>	21,000	19		
		<i>Aphanizomenon</i>	21,000	19		
		<i>Gomphosphaeria</i>	16,000	14		
		<i>Oscillatoria</i>	31,000	27		
		EUGLENOPHYTA				
		Cryptophyceae				
		<i>Chroomonas</i>	830	1		
		<i>Cryptomonas</i>		0		
		Euglenophyceae				
		<i>Euglena</i>		0		
		TOTAL		110,000		
		Sept. 22, 1976	1130	CHLOROPHYTA				Grab sample
Chlorophyceae						
<i>Crucigenia</i>	3,100			1		
<i>Dictyosphaerium</i>	9,800			3		
<i>Gloeoactinium</i>	7,900			3		
<i>Micractinium</i>	3,100			1		
<i>Pediastrum</i>	6,300			2		
<i>Scenedesmus</i>	1,600			1		
<i>Selenastrum</i>				0		
<i>Tetraedron</i>	1,600			1		
CHRYSOPHYTA						
Bacillariophyceae						
<i>Asterionella</i>	5,100			2		
<i>Cyclotella</i>	4,300			2		
<i>Gomphonema</i>				0		
<i>Melosira</i>	7,100			2		
<i>Navicula</i>				0		
<i>Stephanodiscus</i>				0		
CYANOPHYTA						
Myxophyceae						
<i>Anabaena</i>	13,000			4		
<i>Anacystis</i>	5,500			2		
<i>Aphanizomenon</i>	200,000			71		
<i>Oscillatoria</i>	12,000			4		
EUGLENOPHYTA						
Euglenophyceae						
<i>Trachelomonas</i>				0		
TOTAL				290,000		

WATER QUALITY DATA¹

Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance	Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance
Oct. 2, 1975	1300	11.0	6,240	200	July 8, 1976	1430	32.0	3,770	-
Jan. 29, 1976	1400	0.0	5,980	285	July 13, 1976	1415	27.0	3,710	230

WISCONSIN RIVER BASIN
05407000 WISCONSIN RIVER AT MUSCODA, WI--CONTINUED

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
DEC , 1975						
17...	1200	.0	10000	4	108	51
FEB , 1976						
26...	1100	.0	9200	21	522	38
MAR						
18...	1230	3.0	13100	22	778	30
APR						
13...	1230	11.0	19300	20	1040	45
MAY						
10...	1130	16.5	12900	49	1710	36
JUN						
23...	1100	22.0	5190	18	252	90
AUG						
25...	1400	25.0	3140	18	153	89
SEP						
22...	1130	16.5	2400	25	162	66

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
			% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM	% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM	% FINER THAN 16.0 MM
OCT , 1975										
15...	1200	4830	0	4	58	87	96	99	100	--
NOV										
18...	1130	10900	0	5	56	88	96	98	99	100
JAN , 1976										
29...	1530	5980	0	3	69	95	99	100	--	--
MAR										
18...	1230	13100	0	3	66	95	98	99	100	--
APR										
13...	1030	19300	0	4	64	95	98	99	100	--
MAY										
10...	1000	12900	0	2	30	93	98	99	100	--
JUN										
23...	1100	5190	0	5	62	91	97	99	100	--
JUL										
13...	1500	5270	0	4	63	94	98	99	100	--
AUG										
25...	1400	3140	0	10	67	91	95	98	99	100
SEP										
22...	1130	2400	0	6	68	96	99	99	100	--

05407000 WISCONSIN RIVER AT MUSCODA, WI--CONTINUED

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	240	245		---	---	170	155	205	---	230	250
2	205	240	240		---	---	175	145	200	---	220	255
3	215	250	---		---	---	160	150	205	---	225	255
4	215	250	220		---	---	165	165	205	---	240	275
5	215	250	220		---	---	160	160	220	---	235	265
6	220	250	215		---	---	150	155	250	---	245	255
7	220	245	220		---	---	140	155	205	---	235	250
8	225	250	220		---	215	145	170	200	---	235	250
9	240	245	220		---	210	140	165	215	---	230	250
10	240	245	220		---	210	145	160	195	---	240	255
11	240	225	240		---	210	150	170	200	---	240	275
12	230	225	240		---	180	145	160	200	---	225	265
13	225	225	240		---	180	150	180	195	---	220	290
14	235	235	240		---	185	150	165	195	---	230	290
15	240	225	240		225	205	150	195	190	---	220	285
16	240	235	240		220	205	150	225	195	---	225	265
17	220	215	---		210	220	155	165	200	---	230	280
18	225	215	---		225	225	155	165	190	---	235	250
19	230	215	---		---	210	155	150	210	---	240	255
20	230	225	---		210	205	155	150	200	240	245	260
21	245	220	---		215	205	135	165	200	230	250	265
22	245	220	---		215	200	155	190	200	240	245	270
23	250	215	---		210	205	130	170	200	230	240	275
24	240	220	---		210	195	120	170	200	230	235	275
25	240	220	---		215	190	125	185	200	230	245	270
26	240	225	---		220	180	120	170	200	230	240	280
27	245	230	---		210	175	125	175	200	230	240	275
28	240	225	---		200	165	125	185	205	230	240	280
29	240	245	---		200	170	130	180	205	240	225	280
30	240	245	---		---	185	135	190	---	240	255	275
31	240	---	---		---	170	---	195	---	225	255	---
MDNTH	232	232	---		---	---	146	170	203	---	236	268

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	11.5	5.5		---	---	5.0	13.0	16.0	26.0	22.0	17.5
2	17.5	10.0	5.0		---	---	8.0	11.5	13.0	16.0	24.0	15.5
3	15.5	13.0	---		---	---	9.0	9.0	13.0	19.0	23.5	22.0
4	16.5	14.0	---		---	---	7.0	8.5	14.0	18.0	22.5	19.5
5	16.0	14.5	5.5		---	---	11.0	13.5	20.0	18.0	20.0	15.5
6	16.0	14.0	8.0		---	---	12.0	10.5	20.0	25.0	22.5	17.5
7	16.5	12.0	0.5		---	---	11.0	10.0	---	18.0	22.5	---
8	16.0	12.5	5.5		---	---	11.5	12.0	16.0	19.0	22.0	22.5
9	16.5	12.0	5.5		---	---	12.0	14.5	18.0	22.0	21.5	18.0
10	16.0	10.0	6.0		---	---	11.5	11.0	17.0	24.0	24.5	17.5
11	16.0	8.0	4.0		---	---	10.5	11.0	19.0	26.0	21.5	18.0
12	16.0	7.5	5.5		---	---	11.5	16.0	20.0	27.0	21.5	18.5
13	19.0	6.5	6.0		---	---	13.0	15.0	20.0	25.0	20.0	19.5
14	18.5	5.0	5.5		---	---	13.0	14.0	19.0	26.0	18.5	18.0
15	14.0	6.0	6.0		---	---	13.5	14.0	20.0	20.0	21.0	14.5
16	13.5	7.0	5.0		---	---	13.0	12.0	18.0	17.0	17.5	14.5
17	13.0	---	---		---	---	14.5	14.0	16.0	16.0	17.0	14.5
18	13.0	---	---		---	---	15.5	15.0	19.0	22.0	19.5	13.0
19	13.0	---	---		---	6.5	14.5	16.0	18.0	21.0	20.5	15.0
20	13.5	---	---		---	8.5	13.0	17.0	17.0	23.0	23.5	14.5
21	13.0	6.0	---		---	4.0	13.0	18.0	16.0	24.0	26.0	12.0
22	14.5	---	---		---	4.5	10.5	15.0	17.0	21.0	20.5	11.0
23	17.0	4.0	---		---	6.5	12.0	14.0	17.0	22.0	21.5	12.0
24	16.5	0.5	---		---	6.0	9.0	16.0	17.0	26.0	20.5	12.5
25	16.0	0.0	---		---	8.5	10.0	18.0	16.0	22.0	22.0	10.0
26	19.0	0.0	---		---	8.0	12.0	16.0	19.0	24.0	23.5	14.5
27	12.5	7.5	---		---	7.0	13.0	17.0	20.0	23.0	21.5	15.0
28	12.5	7.0	---		---	7.0	14.0	18.0	24.0	22.0	18.5	11.5
29	12.5	6.5	---		---	8.5	14.0	17.0	23.0	24.0	21.0	10.5
30	10.5	6.0	---		---	7.0	13.0	18.0	---	20.0	19.0	13.0
31	11.0	---	---		---	6.0	---	16.0	---	21.0	20.5	---
MONTH	15.0	8.0	---		---	---	11.5	14.0	18.0	22.0	21.5	15.5

WISCONSIN RIVER BASIN

05407000 WISCONSIN RIVER AT MUSCODA, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11	197	11	132	14	340	3	57	2	33	180	6320
2	16	272	13	176	13	378	3	59	2	33	153	4960
3	22	395	13	170	12	365	3	63	2	35	130	4210
4	24	369	13	169	11	340	3	57	3	57	111	3600
5	24	424	14	175	10	304	2	28	3	63	94	3300
6	23	350	14	173	9	316	2	30	4	56	80	2590
7	23	337	15	219	9	300	2	35	4	93	68	2020
8	23	341	17	226	8	273	3	63	4	95	52	1680
9	21	329	19	244	7	240	2	33	4	93	9	292
10	19	301	21	304	7	210	2	33	3	65	25	810
11	18	244	22	325	6	166	2	33	4	91	57	1850
12	16	216	22	418	6	154	2	33	3	63	145	5090
13	14	185	23	545	5	123	2	35	3	62	38	1640
14	12	153	24	638	5	123	3	53	3	63	42	1940
15	11	139	25	849	5	117	3	57	6	133	38	1580
16	15	192	25	890	4	104	3	60	30	729	16	611
17	15	195	16	523	4	108	3	62	26	688	2	84
18	12	180	21	586	4	76	3	60	21	476	10	342
19	10	139	15	360	4	63	3	55	20	464	23	838
20	8	111	15	348	4	76	2	35	17	413	36	1460
21	10	124	13	310	4	108	3	55	10	254	32	1410
22	13	153	18	407	4	119	3	58	6	162	30	1430
23	13	137	24	649	4	119	3	60	5	135	22	1100
24	12	133	24	718	4	99	3	60	5	127	24	1120
25	11	145	23	590	4	95	3	58	13	316	48	2190
26	10	122	21	509	4	84	3	57	17	422	52	2450
27	9	112	19	475	4	78	3	54	60	1620	24	1280
28	9	95	18	394	4	76	2	33	32	950	26	1710
29	8	105	16	318	4	71	2	32	137	4440	32	2340
30	8	104	15	388	3	53	2	35	---	---	23	1890
31	9	114	---	---	3	55	3	53	---	---	10	896
MONTH	---	6413.0	---	12228.0	---	5133.0	---	1496.0	---	12231.0	---	63033.0

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8	718	17	863	36	771	29	443	35	440	14	125
2	22	2140	26	1290	22	423	15	233	40	476	19	155
3	12	1390	25	1100	28	538	15	231	30	343	19	150
4	7	843	54	2220	36	729	12	196	25	264	18	137
5	9	1070	31	1270	24	504	11	159	21	211	22	177
6	5	558	26	999	23	442	9	132	19	182	19	161
7	2	245	25	855	18	356	5	77	22	216	18	143
8	2	173	32	1080	17	323	5	69	19	200	17	136
9	7	442	22	669	13	241	16	201	22	218	20	150
10	10	530	21	722	14	250	11	138	25	215	17	121
11	9	451	31	988	17	308	9	113	18	164	11	73
12	12	603	23	653	16	315	6	75	21	207	8	51
13	15	753	22	642	23	428	7	97	25	232	13	79
14	13	596	30	902	9	175	9	94	22	211	13	81
15	14	607	19	522	9	182	8	73	26	308	17	115
16	13	554	15	407	11	219	4	39	24	248	15	106
17	18	766	21	580	7	147	38	401	18	171	15	97
18	16	671	26	737	11	221	8	76	18	162	23	165
19	23	1010	28	895	14	268	9	87	17	145	20	135
20	25	1290	9	336	8	154	30	280	18	158	22	146
21	17	1140	28	1140	9	158	24	220	17	148	22	157
22	7	630	27	1030	23	395	21	214	13	121	17	117
23	4	390	33	1120	16	279	22	223	11	100	16	114
24	4	354	32	1070	22	381	21	194	12	101	14	102
25	1	135	24	772	20	355	26	250	14	119	3	19
26	2	231	32	917	24	401	27	247	15	140	12	80
27	1	125	29	808	29	472	23	209	17	167	16	108
28	2	166	21	509	51	798	18	190	18	181	17	113
29	2	158	17	397	38	604	20	218	13	122	17	115
30	2	124	21	556	48	752	21	240	8	71	15	106
31	---	---	25	605	---	---	31	376	11	95	---	---
MONTH	---	18903.0	---	26654.0	---	11589.0	---	5785.0	---	6136.0	---	3534.0

TOTAL LOAD FOR YEAR: 173135.0 TONS.

05407500 KICKAPOO RIVER AT ONTARIO, WI

LOCATION.--LAT 43°42'52", LONG 90°35'13", IN SE 1/4 SW 1/4 SEC.2, T.14 N., R.2 W., VERNON COUNTY, HYDROLOGIC UNIT 07070006, 0.7 MI (1.1 KM) SOUTH OF ONTARIO, ON RIGHT BANK 250 FT (76 M) UPSTREAM OF TOWN-ROAD BRIDGE, 0.5 MI (0.8 KM) BELOW BRUSH CREEK.

DRAINAGE AREA.--151 MI² (391 KM²)

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--JULY 1973 TO CURRENT YEAR.

REVISED RECORDS.--WDR WI-75-1: 1974(M).

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 855 FT (261 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 2,110 FT³/S (59.8 M³/S) MAR. 3, 1974, GAGE HEIGHT, 10.41 FT (3.173 M); MINIMUM DAILY, 39 FT³/S (1.10 M³/S) SEPT. 8, 9, 13, 1976.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 500 FT³/S (14.2 M³/S) AND MAXIMUM (M):

DATE	TIME	DISCHARGE		GAGE HEIGHT		DATE	TIME	DISCHARGE		GAGE HEIGHT	
		(FT ³ /S)	(M ³ /S)	(FT)	(M)			(FT ³ /S)	(M ³ /S)	(FT)	(M)
FEB. 15	1815	1,270	40.0	7.73	2.356	MAR. 19	2015	1,370	37.7	7.96	2.426
FEB. 26	2200	704	19.9	5.35	1.631	MAR. 26	0530	1,040	29.4	6.88	2.097
FEB. 27	2015	1,140	32.3	7.25	2.210	MAR. 30	1130	741	21.0	5.49	1.673
MAR. 12	1130	*1,740	49.3	*9.35	2.850	APR. 21	1700	562	15.9	4.54	1.384

MINIMUM DAILY DISCHARGE, 39 FT³/S (1.10 M³/S) SEPT. 8, 9, 13.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(SHIFTING-CONTROL METHOD USED MAR. 13 TO APR. 7, APR. 11, APR. 15 TO MAY 4;
STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 17 TO FEB. 14.)

1.3	36	4.0	414
2.0	105	6.0	836
3.0	242	8.0	1,340

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	DCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	53	81	54	52	79	197	106	68	51	47	43
2	58	53	82	56	50	77	150	100	63	50	45	42
3	58	53	76	56	50	76	130	94	61	49	44	41
4	58	54	74	56	50	69	116	91	60	47	44	40
5	57	55	74	58	52	75	107	89	59	47	50	40
6	57	55	70	56	52	77	97	86	57	47	48	41
7	57	56	71	56	54	82	89	82	57	51	45	40
8	57	58	65	56	54	78	84	80	57	50	44	39
9	57	64	65	56	56	70	62	80	56	49	43	39
10	57	123	65	56	58	70	83	78	56	49	45	40
11	57	67	65	56	60	111	88	77	56	49	45	40
12	57	66	62	56	80	1030	81	75	55	47	45	40
13	58	64	62	56	250	314	80	78	61	49	45	39
14	57	61	117	58	150	202	79	80	62	51	49	40
15	57	62	75	58	774	162	91	80	57	56	45	42
16	56	62	72	58	190	117	91	179	54	59	43	42
17	56	62	70	56	83	91	98	112	54	55	43	42
18	56	61	70	58	90	175	273	85	54	53	44	42
19	56	61	72	56	81	574	168	80	55	48	44	45
20	56	64	72	56	75	526	132	77	53	58	42	48
21	57	86	72	56	75	168	456	74	53	53	42	44
22	53	68	70	56	71	97	250	72	52	54	41	43
23	54	63	66	54	73	94	163	71	53	50	41	43
24	56	64	64	54	75	96	250	70	54	48	41	42
25	61	63	62	54	85	93	303	68	57	46	42	42
26	55	77	60	52	226	414	159	69	53	46	43	43
27	55	65	58	52	512	186	128	66	51	48	43	43
28	54	66	56	52	298	124	113	65	50	56	42	44
29	52	100	56	54	123	187	106	65	56	55	40	44
30	53	226	54	54	---	542	105	71	57	53	41	43
31	54	---	54	52	---	273	---	97	---	60	42	---
TOTAL	1745	2132	2132	1722	3899	6329	4349	2597	1691	1586	1358	1256
MEAN	56.3	71.1	68.8	55.5	134	204	145	83.8	56.4	51.2	43.8	41.9
MAX	61	226	117	58	774	1030	456	179	68	60	50	48
MIN	52	53	54	52	50	69	79	65	50	46	40	39
CF5M	.37	.47	.46	.37	.89	1.35	.96	.55	.37	.34	.29	.28
IN.	.43	.53	.53	.42	.96	1.56	1.07	.64	.42	.39	.33	.31
CAL YR 1975 TOTAL	30721			MEAN 84.2	MAX 1100	MIN 51	CF5M .56	IN 7.57				
WTR YR 1976 TOTAL	30796			MEAN 84.1	MAX 1030	MIN 39	CF5M .56	IN 7.59				

WISCONSIN RIVER BASIN
05407500 KICKAPOO RIVER AT ONTARIO, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1973 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: DECEMBER 1973 TO CURRENT YEAR.
SUSPENDED-SEDIMENT DISCHARGE: OCTOBER 1973 TO CURRENT YEAR.

INSTRUMENTATION.--TEMPERATURE RECORDER SINCE DECEMBER 1973.

REMARKS.--TEMPERATURE RECORDER INOPERATIVE PART OF YEAR. SEDIMENT RECORDS GOOD EXCEPT FOR WINTER PERIOD WHICH ARE FAIR. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR ABOUT 20 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: MAXIMUM RECORDED, 27.5°C JULY 10, 11, 1976; MINIMUM, 0.0°C ON MANY DAYS DURING WINTER PERIODS.

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 4,440 MG/L MAR. 3, 1974; MINIMUM DAILY MEAN, 1 MG/L JAN. 22, 29, MAR. 9, 11, DEC. 28, 1975, FEB. 7, 1976. MAXIMUM OBSERVED, 5,580 MG/L MAR. 3, 1974; MINIMUM OBSERVED, 1 MG/L ON SEVERAL DAYS.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 15,200 TONS (13,800 TONNES) MAR. 3, 1974; MINIMUM DAILY, 0.15 TON (0.14 TONNE) DEC. 28, 1975, FEB. 7, 1976.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: MAXIMUM RECORDED, 27.5°C JULY 10, 11; MINIMUM, 0.0°C ON MANY DAYS DURING WINTER PERIOD.

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 1,780 MG/L MAR. 26; MINIMUM DAILY MEAN, 1 MG/L DEC. 28, FEB. 7. MAXIMUM OBSERVED, 4,280 MG/L MAR. 14; MINIMUM OBSERVED, 1 MG/L DEC. 28, FEB. 4, 7, JUNE 1, JULY 12.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 4,270 TONS (3,870 TONNES) MAR. 19; MINIMUM DAILY, 0.15 TON (0.14 TONNE) DEC. 28, FEB. 7.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TURBIDITY (JTU)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)
OCT , 1975										
22...	1045	52	450	6.5	7.5	18	5	240	24	50
NOV										
19...	1100	61	440	8.1	8.5	3	7	230	5	48
DEC										
17...	1015	70	480	7.8	.0	3	5	250	9	53
JAN , 1976										
28...	1140	52	475	7.6	.0	1	4	240	10	51
FEB										
25...	1130	85	485	7.7	2.0	15	15	200	0	44
MAR										
24...	1200	95	410	7.7	7.5	7	7	210	14	44
APR										
21...	1115	456	300	7.6	9.5	55	90	150	11	31
MAY										
18...	1130	85	440	7.8	12.0	3	4	230	16	49
JUN										
08...	1145	57	450	7.5	20.0	2	8	230	19	47
JUL										
28...	1015	59	425	7.8	21.0	17	10	220	22	45
AUG										
24...	1130	41	430	7.9	19.5	6	6	230	14	47
SEP										
22...	1245	43	440	8.5	11.0	10	4	230	12	49

DATE	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT , 1975										
22...	29	2.5	2	.1	1.4	266	0	220	1.4	15
NOV										
19...	27	2.5	2	.1	1.5	276	0	226	3.5	16
DEC										
17...	29	2.9	2	.1	3.3	296	0	243	7.5	14
JAN , 1976										
28...	27	2.5	2	.1	1.0	276	0	228	11	14
FEB										
25...	23	3.8	4	.1	3.4	250	0	205	8.0	16
MAR										
24...	25	2.7	3	.1	2.3	242	0	198	7.7	15
APR										
21...	17	2.9	4	.1	4.6	172	0	141	6.9	11
MAY										
16...	25	2.5	2	.1	2.2	255	0	209	6.5	14
JUN										
08...	28	2.6	2	.1	1.7	260	0	213	13	11
JUL										
28...	27	2.3	2	.1	2.2	246	0	202	6.2	13
AUG										
24...	27	2.9	3	.1	1.6	262	0	215	5.3	12
SEP										
22...	27	2.6	2	.1	1.6	270	0	221	1.4	13

05407500 KICKAPOO RIVER AT ONTARIO, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)
OCT , 1975									
22...	4.5	.1	4.0	249	241	.34	35.0	.40	1.8
NOV									
19...	4.8	.1	9.0	248	245	.34	40.8	--	--
DEC									
17...	6.0	.1	12	275	266	.37	52.0	--	--
JAN , 1976									
28...	5.3	.1	11	247	254	.34	34.7	.99	4.4
FEB									
25...	7.8	.1	9.7	247	236	.34	56.7	.96	4.3
MAR									
24...	4.9	.1	9.2	226	227	.31	58.0	.92	4.1
APR									
21...	5.8	.1	7.5	195	172	.27	240	1.1	4.8
MAY									
18...	4.7	.1	5.9	238	232	.32	54.6	.61	2.7
JUN									
08...	3.6	.1	7.1	243	232	.33	37.4	.40	1.8
JUL									
28...	4.8	.1	7.2	226	225	.31	36.0	.34	1.5
AUG									
24...	3.0	.1	7.3	245	232	.33	27.1	.37	1.6
SEP									
22...	5.6	.1	9.0	254	243	.35	29.5	.41	1.8

DATE	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT , 1975									
22...	.00	.00	.40	.31	.06	--	10	120	2.8
NOV									
19...	--	--	--	.32	.16	--	20	90	2.8
DEC									
17...	--	--	--	.26	.18	.55	60	90	1.5
JAN , 1976									
28...	.01	.03	1.0	.25	.07	.21	30	80	1.7
FEB									
25...	.01	.03	.97	1.1	.21	.64	60	110	--
MAR									
24...	.00	.00	.92	.36	.12	.37	40	70	3.7
APR									
21...	.02	.07	1.1	2.5	.55	1.7	70	50	19
MAY									
18...	.02	.07	.63	.48	.10	.31	40	70	5.7
JUN									
08...	.05	.16	.45	.48	.15	.46	60	160	2.2
JUL									
28...	.04	.13	.38	.80	.19	.58	20	140	--
AUG									
24...	.03	.10	.40	.43	.15	.46	50	80	17
SEP									
22...	.01	.03	.42	.25	.14	.43	50	70	3.0

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)
OCT , 1975							
22...	1045	52	6	0	0	0	0

DATE	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT , 1975							
22...	0	10	2	120	0	0	6

WISCONSIN RIVER BASIN

05407500 KICKAPOO RIVER AT ONTARIO, WI--CONTINUEO

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)
OCT , 1975										
22...	1045	52	.0	0	--	.00	.0	.0	0	.00
JAN , 1976										
28...	1140	52	.0	0	--	.00	.0	.0	0	.00
APR										
21...	1115	456	.0	0	.00	.00	.0	.0	0	.00
JUN										
08...	1145	57	.0	0	.00	.00	.0	.0	0	.00
JUL										
28...	1015	59	.0	0	.00	.00	.0	.0	69	.00
AUG										
24...	1130	41	.0	0	.00	.00	.0	.0	0	.00

DATE	ODO IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)
OCT , 1975										
22...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00
JAN , 1976										
28...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00
APR										
21...	.0	.00	.0	.00	.0	.00	.3	.00	.0	.00
JUN										
08...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00
JUL										
28...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00
AUG										
24...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00

DATE	HEPTA-CHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL TOX-APHENE (UG/L)	TOX-APHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
OCT , 1975										
22...	.0	.00	.0	.00	.0	0	0	.00	.00	.00
JAN , 1976										
28...	.0	.00	.0	.00	.0	0	0	.00	.00	.00
APR										
21...	.0	.00	.0	.00	.0	0	0	.00	.00	.00
JUN										
08...	.0	.00	.0	.00	.0	0	0	.00	.00	.00
JUL										
28...	.0	.00	.0	.00	.0	0	0	.00	.00	.00
AUG										
24...	.0	.00	.0	.00	.0	0	0	.00	.00	.00

05407500 KICKAPOO RIVER AT ONTARIO, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT , 1975												
07...	0945	57	--	7.9	9.5	3	10.4	95	1.2	580	861	160
14...	1130	57	--	8.2	14.5	5	8.7	89	1.2	2900	846	8180
22...	1045	52	450	8.5	7.5	5	11.2	98	1.2	600	130	200
29...	1120	52	440	8.4	7.0	5	11.0	95	1.0	--	250	140
NOV												
05...	1045	55	--	8.2	9.5	4	11.4	105	1.1	82000	260	160
10...	1130	123	--	7.8	8.0	55	9.5	84	9.0	>27000	>6700	>20000
19...	1100	61	440	8.1	8.5	7	11.4	102	1.7	850	8200	150
24...	1315	64	455	--	.5	6	13.3	96	.8	11000	920	680
DEC												
02...	1130	82	--	8.0	.0	10	11.3	81	.7	3800	580	1500
09...	1010	65	--	--	--	4	--	--	1.1	1100	8280	260
15...	0900	71	--	--	--	--	--	--	--	29000	3800	2400
17...	1015	70	480	7.8	.0	5	13.2	95	.7	1000	270	520
22...	1030	70	440	7.8	.5	4	12.0	87	.9	920	120	150
29...	1100	56	--	7.9	.0	7	12.6	91	.5	1400	280	360
JAN , 1976												
06...	1125	58	--	7.8	.0	5	12.3	88	1.4	620	240	350
13...	1015	56	400	7.4	.0	5	11.0	79	.9	1500	370	210
20...	1035	56	--	7.4	.0	3	11.5	83	.7	1700	350	280
28...	1140	52	475	7.6	.0	4	11.9	86	.8	1200	140	250
FEB												
04...	1100	50	445	8.1	.0	5	11.0	79	.5	1200	280	240
11...	1145	60	440	7.5	.0	15	10.8	78	6.4	2100	840	5800
19...	1125	81	390	7.8	2.0	8	11.8	89	2.1	2600	350	6200
25...	1130	85	485	7.7	2.0	15	12.2	92	1.9	1200	300	7400
MAR												
03...	1155	76	400	7.5	1.0	3	12.4	91	.9	2800	400	210
10...	1055	70	475	7.7	2.5	3	12.4	95	.6	2500	826	170
17...	0830	91	395	7.6	.0	2	12.3	88	2.5	520	100	490
24...	1200	95	410	7.7	7.5	7	11.1	97	.1	330	92	180
31...	1110	273	320	6.7	4.0	35	12.0	96	2.2	7000	330	2600
APR												
06...	1020	96	460	7.5	8.5	6	11.6	104	1.5	884	810	58
15...	1130	91	400	7.9	13.0	6	11.1	110	1.9	4500	380	390
21...	1115	456	300	7.6	9.5	90	9.6	88	4.9	65000	15000	12000
27...	1125	130	410	7.9	8.0	5	12.7	112	.8	580	180	8130
MAY												
04...	1150	91	440	8.2	8.0	3	13.6	120	1.2	130	827	65
12...	1215	75	400	8.0	13.0	3	11.9	118	2.2	1700	160	180
18...	1130	85	440	7.8	12.0	4	11.9	116	1.8	2600	720	220
25...	1225	68	420	7.8	15.5	4	11.3	118	2.4	1000	110	120
JUN												
02...	1130	64	470	7.3	17.0	6	10.6	115	2.4	8300	1600	480
08...	1145	57	450	7.5	20.0	8	9.1	105	2.5	16000	2600	920
16...	1100	54	420	7.7	17.0	8	7.4	80	2.7	6300	1200	480
22...	1215	50	440	8.2	19.0	7	11.2	126	2.0	8300	2600	770
28...	1200	49	430	8.5	22.0	5	9.6	114	2.3	13000	4700	570
JUL , 1976												
07...	1145	52	430	8.2	21.5	5	9.7	114	1.4	6500	2400	1400
14...	1120	50	440	7.8	24.0	2	8.9	110	1.5	15000	350	280
20...	1150	64	410	7.3	21.0	--	--	--	1.4	62000	470	3000
28...	1015	59	425	7.8	21.0	10	6.8	79	2.2	99000	15000	9200
AUG												
05...	1220	52	410	8.2	20.0	12	8.2	94	1.9	160	19000	2500
11...	1115	45	445	8.1	21.0	6	7.1	83	1.2	8580	22000	710
18...	1140	43	440	8.1	19.0	4	7.6	85	1.4	34000	3000	830
24...	1130	41	430	7.9	19.5	6	9.3	106	1.8	36200	--	8800
31...	1130	38	--	8.1	18.0	9	8.1	89	3.2	847	848000	1000
SEP												
08...	1200	38	440	8.3	18.0	6	9.6	105	1.4	27000	8260	140
15...	1140	42	420	8.8	14.0	5	9.2	93	2.5	--	300	170
22...	1225	43	440	8.5	11.0	4	9.5	90	1.5	--	--	70
22...	1245	43	440	8.5	11.0	4	9.5	90	1.5	6100	--	70
29...	1230	44	430	8.5	10.0	4	11.4	106	2.5	28000	1000	160

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

WISCONSIN RIVER BASIN

05407500 KICKAPOO RIVER AT ONTARIO, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method			
Oct. 22, 1975	1045	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		<i>Chlamydomonas</i>		0				
		<i>Scenedesmus</i>		0				
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Achnanthes</i>	48	2				
		<i>Amphora</i>		0				
		<i>Cocconeis</i>	48	2				
		<i>Cyclotella</i>	240	12				
		<i>Cymatopleura</i>		0				
		<i>Cymbella</i>	48	2				
		<i>Diatoma</i>	96	5				
		<i>Fragilaria</i>		0				
		<i>Gomphonema</i>	96	5				
		<i>Navicula</i>	960	49				
		<i>Neidium</i>		0				
		<i>Nitzschia</i>	380	20				
		<i>Surirella</i>		0				
		<i>Synedra</i>	48	2				
		TOTAL	1,900					
		Nov. 19, 1975	1100	CHLOROPHYTA				Grab sample
				Chlorophyceae				
<i>Scenedesmus</i>				0				
CHRYSOPHYTA								
Bacillariophyceae								
<i>Achnanthes</i>				0				
<i>Amphora</i>				0				
<i>Cocconeis</i>				0				
<i>Cyclotella</i>	92			3				
<i>Cymatopleura</i>	92			3				
<i>Cymbella</i>	180			6				
<i>Diatoma</i>	92			3				
<i>Gomphonema</i>				0				
<i>Melosira</i>				0				
<i>Navicula</i>	2,100			70				
<i>Neidium</i>				0				
<i>Nitzschia</i>	460			15				
<i>Surirella</i>				0				
<i>Synedra</i>				0				
TOTAL	3,000							
Dec. 17, 1975	1015			CHLOROPHYTA			Grab sample	
				Chlorophyceae				
				<i>Chlamydomonas</i>	20	4		
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Achnanthes</i>	39	8				
		<i>Amphora</i>		0				
		<i>Cocconeis</i>		0				
		<i>Cyclotella</i>	59	12				
		<i>Cymatopleura</i>		0				
		<i>Cymbella</i>		0				
		<i>Diatoma</i>	20	4				
		<i>Eunotia</i>		0				
		<i>Melosira</i>		0				
		<i>Meridion</i>		0				
		<i>Navicula</i>	220	42				
		<i>Nitzschia</i>	39	8				
		<i>Pinnularia</i>		0				
		<i>Surirella</i>	20	4				
		<i>Synedra</i>	98	19				
		CYANOPHYTA						
		Myxophyceae						
		<i>Gomphosphaeria</i>		0				
TOTAL	510							
Jan. 28, 1976	1140	CHRYSOPHYTA			Grab sample			
		Bacillariophyceae						
		<i>Achnanthes</i>	61	9				
		<i>Amphora</i>		0				
		<i>Cocconeis</i>		0				
		<i>Cyclotella</i>	20	3				
		<i>Cymatopleura</i>		0				
		<i>Cymbella</i>		0				
		<i>Diatoma</i>		0				
		<i>Gomphonema</i>	160	23				
		<i>Navicula</i>	370	51				
		<i>Nitzschia</i>	81	11				
		<i>Rhoicosphenia</i>		0				
		<i>Surirella</i>		0				
		<i>Synedra</i>	20	3				
		TOTAL	710					

05407500 KICKAPOO RIVER AT ONTARIO, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Feb. 25, 1976	1200	CHLOROPHYTA			
		Chlorophyceae			
		<i>Chlamydomonas</i>		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	20	4	
		<i>Cocconeis</i>	20	4	
		<i>Cymbella</i>	39	8	
		<i>Diatoma</i>		0	
		<i>Gomphonema</i>	59	12	
		<i>Meridion</i>		0	
		<i>Navicula</i>	220	46	
		<i>Nitzschia</i>	39	8	
		<i>Rhoicosphenia</i>	20	4	
		<i>Surirella</i>	59	12	
		<i>Synedra</i>		0	
		PYRRHOPHYTA			
Dinophyceae					
<i>Glenodinium</i>		0			
TOTAL		470			
Mar. 24, 1976	1200	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	52	9	
		<i>Amphora</i>		0	
		<i>Cocconeis</i>		0	
		<i>Cyclotella</i>		0	
		<i>Cymatopleura</i>		0	
		<i>Cymbella</i>	35	6	
		<i>Diatoma</i>		0	
		<i>Fragilaria</i>		0	
		<i>Gomphonema</i>	210	34	
		<i>Melosira</i>		0	
		<i>Meridion</i>	17	3	
		<i>Navicula</i>	170	29	
		<i>Nitzschia</i>	69	11	
		<i>Rhoicosphenia</i>		0	
		<i>Surirella</i>	17	3	
		<i>Synedra</i>	35	6	
		CYANOPHYTA			
		Myxophyceae			
<i>Oscillatoria</i>		0			
TOTAL		600			
Apr. 21, 1976	1115	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	420	6	
		<i>Cocconeis</i>		0	
		<i>Cyclotella</i>	140	2	
		<i>Cymbella</i>	560	8	
		<i>Diatoma</i>		0	
		<i>Fragilaria</i>		0	
		<i>Gomphonema</i>	1,300	18	
		<i>Hantzschia</i>		0	
		<i>Meridion</i>	280	4	
		<i>Navicula</i>	710	10	
		<i>Nitzschia</i>	2,100	31	
		<i>Surirella</i>	1,400	20	
		<i>Synedra</i>		0	
		TOTAL		6,900	
		May 18, 1976	1130	CHRYSOPHYTA			Grab sample
Bacillariophyceae					
<i>Achnanthes</i>	220			9	
<i>Cyclotella</i>	170			7	
<i>Cymatopleura</i>	44			2	
<i>Cymbella</i>	170			7	
<i>Diatoma</i>	44			2	
<i>Gomphonema</i>	87			4	
<i>Navicula</i>	610			25	
<i>Nitzschia</i>	440			18	
<i>Synedra</i>	520			22	
EUGLENOPHYTA					
Euglenophyceae					
<i>Euglena</i>	87			4	
TOTAL		2,400			

WISCONSIN RIVER BASIN

05407500 KICKAPOO RIVER AT ONTARIO, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
June 8, 1976	1145	CHRYSTOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Cyclotella</i>	230	3	
		<i>Cymbella</i>	470	6	
		<i>Gomphonema</i>	230	3	
		<i>Navicula</i>	4,000	49	
		<i>Nitzschia</i>	3,000	37	
		<i>Surirella</i>	120	1	
		<i>Synedra</i>	120	1	
		TOTAL	8,200		
July 28, 1976	1015	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	55	1	
		<i>Pediastrum</i>		0	
		<i>Scenedesmus</i>		0	
		<i>Sphaerocystis</i>	500	6	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	440	6	
		<i>Amphora</i>	55	1	
		<i>Cocconeis</i>	280	4	
		<i>Cyclotella</i>	390	5	
		<i>Cymbella</i>	390	5	
		<i>Gomphonema</i>	55	1	
		<i>Navicula</i>	2,500	32	
		<i>Nitzschia</i>	1,500	19	
		<i>Pinnularia</i>	440	6	
		<i>Rhoicosphenia</i>	110	1	
		<i>Surirella</i>	55	1	
		<i>Synedra</i>	55	1	
		CYANOPHYTA			
		Myxophyceae			
		<i>Agmenellum</i>	880	12	
<i>Oscillatoria</i>		0			
TOTAL	7,700				
Aug. 24, 1976	1130	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Chlamydomonas</i>	440	11	
		<i>Coelastrum</i>		0	
		<i>Scenedesmus</i>	220	6	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		<i>Amphora</i>	550	14	
		<i>Cocconeis</i>	110	3	
		<i>Cymatopleura</i>		0	
		<i>Cymbella</i>	220	6	
		<i>Diatoma</i>	110	3	
		<i>Melosira</i>		0	
		<i>Navicula</i>	1,800	44	
		<i>Nitzschia</i>	220	6	
		<i>Rhoicosphenia</i>	110	3	
		CYANOPHYTA			
		Myxophyceae			
		<i>Oscillatoria</i>		0	
		EUGLENOPHYTA			
Cryptophyceae					
<i>Cryptomonas</i>	110	3			
Euglenophyceae					
<i>Trachelomonas</i>	110	3			
TOTAL	4,000				
Sept. 22, 1976	1245	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Scenedesmus</i>	590	11	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		<i>Cyclotella</i>	150	3	
		<i>Cymatopleura</i>	440	8	
		<i>Cymbella</i>	150	3	
		<i>Diatoma</i>	440	8	
		<i>Epithemia</i>	590	11	
		<i>Gomphonema</i>	220	4	
		<i>Melosira</i>	220	4	
		<i>Navicula</i>	2,100	39	
		Chrysophyceae			
		<i>Ochromonas</i>	74	1	
		CYANOPHYTA			
		Myxophyceae			
		<i>Anacystis</i>	150	3	
		EUGLENOPHYTA			
Euglenophyceae					
<i>Trachelomonas</i>	220	4			
TOTAL	5,300				

05407500 KICKAPOO RIVER AT ONTARIO, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

BENTHIC MACROINVERTEBRATES

Date	Organism	Percent composition	Sampling method
Dec. 2, 1975	ARTHROPODA		Artificial substrate
	Crustacea		
	Decapoda		
	Astacidae	0	
	Insecta		
	Coleoptera		
	Dryopidae	0	
	Elmidae	0	
	Diptera		
	Chironomidae	19	
	Rhagionidae	3	
	Simuliidae	2	
	Tipulidae	4	
	Ephemeroptera		
	Heptageniidae	15	
	Odonata		
	Calopterygidae	0	
	Plecoptera		
	Pteronarcidae	0	
	Trichoptera		
	Brachycentridae	1	
	Hydropsychidae	53	
MOLLUSCA			
Gastropoda			
Ancylidae	2		
June 28, 1976	ARTHROPODA		Artificial substrate
	Insecta		
	Diptera		
	Chironomidae	22	
	Simuliidae	11	
	Ephemeroptera		
	Baetidae	55	
	Caenidae	3	
	Heptageniidae	5	
	Odonata		
	Gomphidae	0	
	Trichoptera		
	Hydropsychidae	3	
	MOLLUSCA		
	Gastropoda		
	Ancylidae	1	
July 20, 1976	ARTHROPODA		Artificial substrate
	Insecta		
	Diptera		
	Chironomidae	64	
	Simuliidae	28	
	Ephemeroptera		
	Baetidae	6	
	Heptageniidae	1	
	Tricorythidae	0	
	Trichoptera		
	Hydropsychidae	0	
	MOLLUSCA		
	Gastropoda		
	Ancylidae	1	

WISCONSIN RIVER BASIN

05407500 KICKAPOO RIVER AT ONTARIO, WI--CONTINUED

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS. SED. FALL DIAM.									
			% FINER THAN .002 MM	% FINER THAN .004 MM	% FINER THAN .008 MM	% FINER THAN .016 MM	% FINER THAN .031 MM	% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM	% FINER THAN 1.00 MM
APR 21... 1976	1115	456	21	26	32	42	64	74	79	85	92	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM.								
			% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM	% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM	% FINER THAN 16.0 MM
JAN 28... 1976	1140	52	--	3	20	85	97	98	99	100	--
APR 21... 1976	1115	456	--	1	6	51	90	94	96	99	100
JUN 08... 1976	1145	57	--	1	7	59	98	99	100	--	--
JUL 20... 1976	1150	64	3	8	22	79	98	99	100	--	--
AUG 24... 1976	1130	41	1	4	21	79	98	99	100	--	--

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.0	9.0	10.0	10.5	8.5	9.5	0.0	0.0	0.0	1.0	0.5	0.5
2	10.5	7.0	8.5	8.5	7.0	8.0	0.0	0.0	0.0	0.5	0.0	0.5
3	12.5	7.5	10.0	10.5	8.5	10.0	0.0	0.0	0.0	0.0	0.0	0.0
4	13.5	9.5	11.5	12.0	10.0	11.0	0.5	0.0	0.0	0.0	0.0	0.0
5	13.5	10.5	12.0	11.5	9.0	10.0	4.5	0.0	2.5	0.0	0.0	0.0
6	13.0	9.5	11.0	12.5	11.0	12.0	3.5	0.0	1.0	0.0	0.0	0.0
7	13.5	9.5	11.5	13.0	11.5	12.5	0.5	0.0	0.0	0.0	0.0	0.0
8	13.5	10.5	12.0	12.0	10.0	11.8	1.0	0.0	0.5	0.0	0.0	0.0
9	14.5	12.5	13.5	10.5	9.5	10.0	3.0	1.0	2.0	0.5	0.0	0.0
10	12.5	11.0	12.0	9.5	7.0	8.5	2.5	1.5	2.0	0.0	0.0	0.0
11	12.5	9.0	10.5	7.0	5.5	6.0	2.5	2.0	2.0	0.5	0.0	0.5
12	13.5	9.0	11.0	6.0	4.0	5.5	2.0	0.5	1.5	0.5	0.5	0.5
13	17.0	12.5	14.5	4.0	2.0	3.0	4.0	1.5	2.5	0.5	0.5	0.5
14	16.5	14.0	15.0	2.5	0.5	1.5	6.0	3.0	5.0	0.5	0.5	0.5
15	14.5	9.5	12.0	4.5	1.5	3.0	3.0	0.0	1.0	0.5	0.5	0.5
16	9.5	7.0	8.5	6.0	2.5	4.0	0.5	0.0	0.0	0.5	0.0	0.5
17	10.0	7.0	8.5	7.0	4.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0
18	9.0	6.0	7.5	8.0	6.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0
19	8.5	5.0	6.5	9.5	7.5	8.5	0.0	0.0	0.0	0.0	0.0	0.0
20	9.0	5.5	7.5	9.0	7.5	8.5	0.0	0.0	0.0	0.0	0.0	0.0
21	9.0	7.0	8.0	7.5	2.0	5.0	0.5	0.0	0.5	0.0	0.0	0.0
22	10.5	7.0	8.5	2.0	0.5	1.0	0.5	0.5	0.5	0.0	0.0	0.0
23	13.5	10.0	12.0	1.0	0.0	0.5	1.0	0.5	0.5	0.0	0.0	0.0
24	14.0	11.5	13.5	1.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0
25	11.5	8.0	9.5	0.5	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0
26	8.5	6.0	7.5	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0
27	10.5	7.0	8.5	0.0	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0
28	11.5	9.0	10.5	0.0	0.0	0.0	0.5	0.0	0.5	---	---	---
29	9.0	6.5	7.5	2.5	0.0	1.5	0.5	0.0	0.0	---	---	---
30	8.0	5.0	6.5	3.0	0.0	2.0	0.5	0.0	0.0	---	---	---
31	10.0	7.0	8.5	---	---	---	1.0	0.5	0.5	---	---	---
MDNTH	17.0	5.0	10.0	13.0	0.0	5.5	6.0	0.0	1.0	1.0	0.0	0.0

05407500 KICKAPOO RIVER AT ONTARIO, WI--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	1.5	0.0	0.5	6.5	3.5	5.0	12.5	9.0	11.0
2	---	---	---	0.0	0.0	0.0	9.5	4.0	7.0	10.5	8.5	9.5
3	---	---	---	1.5	0.0	1.0	10.5	7.5	9.0	9.5	7.0	8.0
4	---	---	---	1.0	0.0	0.5	10.5	6.0	8.0	13.5	6.5	10.0
5	0.0	0.0	0.0	1.0	0.0	0.5	12.0	7.0	9.0	13.5	11.5	12.5
6	0.0	0.0	0.0	0.5	0.0	0.0	13.0	8.0	10.5	14.0	9.0	11.0
7	0.0	0.0	0.0	2.0	0.0	1.0	13.0	8.5	10.5	14.5	9.0	11.5
8	0.0	0.0	0.0	1.0	0.5	1.0	12.5	7.5	10.0	15.5	9.0	12.5
9	0.0	0.0	0.0	2.5	0.5	1.5	12.5	7.5	10.5	18.5	12.0	15.0
10	0.0	0.0	0.0	4.5	1.5	3.0	10.5	9.0	9.5	19.0	13.5	16.0
11	0.0	0.0	0.0	4.0	1.0	2.5	11.0	6.5	9.0	18.0	12.5	15.0
12	0.0	0.0	0.0	2.5	0.0	0.5	12.0	6.5	9.0	17.5	12.0	14.5
13	0.0	0.0	0.0	1.0	0.0	0.5	13.5	7.5	10.5	15.5	12.5	14.0
14	0.5	0.0	0.0	3.0	0.0	1.5	14.0	10.5	12.5	19.0	12.0	15.0
15	1.0	0.0	0.5	3.0	0.0	1.5	15.0	13.0	14.0	16.0	13.5	14.5
16	1.0	0.0	0.5	2.5	0.5	1.5	17.0	14.0	15.5	13.5	12.0	13.0
17	2.0	0.5	1.5	2.5	0.0	1.0	16.5	15.0	15.5	16.0	10.5	13.5
18	1.5	0.5	1.0	5.0	2.0	3.5	16.0	14.0	15.0	17.5	11.5	14.5
19	3.0	1.5	2.0	6.5	1.5	4.0	14.5	11.0	13.0	19.0	12.5	15.5
20	3.0	1.0	2.0	7.5	4.0	6.0	12.5	10.5	11.5	22.0	16.0	18.5
21	1.5	0.0	1.0	6.0	3.0	4.0	10.5	9.5	9.5	21.0	15.5	18.0
22	0.5	0.0	0.0	5.5	1.0	3.0	12.5	8.5	10.0	17.5	14.5	16.0
23	0.0	0.0	0.0	8.0	3.0	5.5	11.0	9.0	9.5	18.0	12.5	15.0
24	2.5	0.0	0.5	9.5	6.5	7.5	9.0	6.5	8.0	18.5	13.0	15.5
25	3.0	0.0	1.5	8.5	5.5	7.0	10.5	5.5	8.0	19.5	13.0	16.0
26	3.5	0.0	1.5	8.5	6.5	7.5	12.0	6.5	9.5	20.5	14.0	17.0
27	3.0	0.5	1.0	7.0	5.5	6.5	12.0	7.0	10.0	20.0	14.5	17.0
28	2.5	0.0	1.5	8.5	4.0	6.5	13.5	8.0	10.5	18.5	15.0	16.5
29	3.0	1.5	2.0	8.5	7.5	8.0	13.5	9.0	11.5	16.5	15.5	16.0
30	---	---	---	7.5	4.5	6.0	13.5	10.5	12.0	17.0	14.5	15.5
31	---	---	---	5.0	3.5	4.5	---	---	---	19.0	14.0	16.5
MONTH	3.5	0.0	0.5	9.5	0.0	3.0	17.0	3.5	10.5	22.0	6.5	14.5
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.0	16.5	18.0	23.0	16.5	19.5	---	---	---	20.5	17.5	19.0
2	21.5	15.5	18.5	23.0	17.0	19.5	---	---	---	19.5	15.5	17.5
3	22.0	15.5	18.5	23.5	16.5	20.0	---	---	---	21.5	16.5	18.5
4	22.0	15.5	18.5	24.5	17.5	20.5	---	---	---	19.0	15.0	17.0
5	22.5	16.0	19.0	25.5	18.0	21.5	---	---	---	18.5	14.0	16.5
6	23.5	16.5	20.0	25.0	19.0	22.0	---	---	---	19.5	15.0	17.0
7	24.0	17.5	20.5	25.0	20.5	22.5	---	---	---	21.5	16.5	19.0
8	24.5	17.5	21.0	25.5	19.0	22.5	---	---	---	21.0	16.5	19.0
9	25.0	19.0	22.0	27.0	21.0	24.0	---	---	---	18.5	15.5	17.0
10	25.0	19.5	22.0	27.5	22.5	25.0	---	---	---	16.5	12.0	14.5
11	26.0	20.5	23.0	27.5	23.5	25.5	24.5	20.0	22.0	17.0	12.0	14.5
12	26.0	21.0	23.5	25.5	20.0	22.5	24.0	20.0	22.0	17.5	12.5	15.0
13	26.0	20.0	22.5	26.0	19.0	22.5	24.5	19.0	21.5	18.0	14.5	16.5
14	25.5	20.0	22.5	26.5	21.5	24.0	21.5	19.0	20.0	18.0	16.0	17.0
15	23.5	19.5	22.0	23.5	21.0	21.0	21.0	16.0	18.5	16.0	13.5	14.5
16	19.5	16.5	18.0	21.0	21.0	21.0	19.5	15.0	17.0	15.5	11.5	13.5
17	21.0	15.5	18.5	21.0	21.0	21.0	20.5	16.0	17.5	16.0	12.0	14.0
18	19.0	17.0	18.0	21.0	21.0	21.0	24.5	17.0	20.5	16.5	12.5	14.5
19	20.5	14.0	17.5	21.0	21.0	21.0	25.5	20.0	23.0	15.0	13.5	14.0
20	23.0	15.5	19.0	21.0	21.0	21.0	24.5	19.5	22.0	15.5	13.0	14.5
21	24.0	16.5	20.0	21.0	21.0	21.0	24.5	17.5	21.0	14.0	12.0	13.0
22	22.5	17.0	20.0	---	---	---	24.5	19.0	21.5	13.5	9.5	12.0
23	21.0	17.5	19.5	---	---	---	24.0	20.0	21.5	13.0	11.0	12.0
24	18.5	16.5	17.5	---	---	---	23.0	18.0	20.5	12.5	8.5	10.5
25	22.0	15.5	18.5	---	---	---	21.5	19.0	20.5	12.0	8.5	10.0
26	22.5	18.0	20.5	---	---	---	23.0	18.5	20.5	13.5	9.0	11.0
27	25.0	19.0	22.0	---	---	---	24.0	19.5	21.5	12.0	11.0	11.5
28	25.5	20.0	22.5	---	---	---	20.5	17.0	19.0	12.0	8.5	10.0
29	21.5	18.0	19.0	---	---	---	19.0	15.0	17.0	12.5	8.5	10.5
30	22.5	16.5	19.0	---	---	---	20.5	15.0	17.5	14.0	9.5	12.0
31	---	---	---	---	---	---	21.0	16.5	18.5	---	---	---
MONTH	26.0	14.0	20.0	---	---	---	---	---	---	21.5	8.5	14.5

WISCONSIN RIVER BASIN

05407500 KICKAPOO RIVER AT ONTARIO, WI--CONTINUED

SUSPENDED-SOLID DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9	1.4	31	4.5	60	13	7	1.0	67	9.4	16	3.6
2	11	1.7	30	4.4	15	3.4	8	1.2	40	5.4	3	.62
3	9	1.5	17	2.5	10	2.1	10	1.5	20	2.7	4	.83
4	6	.98	19	2.8	18	3.6	15	2.3	6	.81	6	1.1
5	7	1.0	13	1.9	14	2.8	30	4.7	10	1.4	7	1.4
6	4	.69	18	2.6	11	2.1	16	2.5	10	1.4	10	2.2
7	5	.83	20	2.9	10	1.9	14	2.1	1	.15	10	2.2
8	5	.84	16	2.4	12	2.1	10	1.5	2	.29	9	1.9
9	12	1.8	50	9.5	15	2.6	8	1.2	5	.78	9	1.6
10	15	2.4	159	61	16	2.8	9	1.4	6	.94	8	1.5
11	12	1.8	32	5.6	18	3.2	9	1.4	9	1.5	32	15
12	8	1.3	13	2.2	18	3.0	9	1.4	150	32	1090	4150
13	3	.46	9	1.4	18	3.0	8	1.2	1090	736	204	199
14	5	.84	8	1.2	50	16	7	1.1	439	178	98	56
15	7	1.0	14	2.3	40	8.1	6	.94	1420	2970	58	28
16	5	.83	11	1.7	34	6.6	6	.94	84	43	23	7.3
17	2	.37	11	1.8	24	4.5	6	.94	33	7.1	15	3.7
18	5	.71	15	2.4	32	6.0	38	6.0	47	12	174	164
19	13	2.0	16	2.5	24	4.7	40	6.0	16	3.6	1580	4270
20	17	2.6	24	4.1	4	.78	8	1.2	7	1.5	761	1200
21	11	1.7	70	16	21	4.1	36	5.4	10	2.0	91	48
22	12	1.8	19	3.4	12	2.3	36	5.4	12	2.4	50	13
23	16	2.3	8	1.2	6	1.1	36	5.2	16	3.3	72	18
24	26	3.9	13	2.1	6	1.0	36	5.2	31	6.4	40	11
25	21	3.6	14	2.3	8	1.3	42	6.1	18	4.3	29	7.4
26	14	2.1	37	7.9	4	.65	32	4.5	252	318	1780	2750
27	14	2.1	19	3.2	4	.63	54	7.6	721	1520	290	154
28	17	2.5	16	2.8	1	.15	33	4.6	253	257	111	38
29	11	1.5	100	54	6	.91	56	8.2	94	35	211	114
30	15	2.2	324	249	2	.29	56	8.2	---	---	964	1600
31	20	2.9	---	---	7	1.0	67	9.4	---	---	190	142
MONTH	---	51.65	---	461.60	---	105.71	---	110.32	---	6156.37	---	15005.35

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	118	64	15	4.4	24	4.4	9	1.3	13	1.6	18	2.1
2	77	31	13	3.5	17	2.9	10	1.4	12	1.5	19	2.2
3	51	18	11	2.8	19	3.1	15	2.0	29	3.5	21	2.3
4	38	12	9	2.3	22	3.6	9	1.1	32	3.8	22	2.4
5	29	8.3	13	3.2	26	4.2	8	.97	30	4.1	20	2.2
6	21	5.7	16	3.8	29	4.6	7	.88	27	3.5	19	2.0
7	14	3.3	9	2.0	29	4.6	12	1.6	24	2.9	14	1.5
8	11	2.5	11	2.3	35	5.4	8	1.0	21	2.6	11	1.1
9	9	1.9	12	2.7	29	4.4	7	.93	19	2.2	19	2.0
10	8	1.8	11	2.4	23	3.5	5	.66	18	2.1	21	2.3
11	8	1.9	12	2.4	24	3.7	5	.69	23	2.7	19	2.1
12	9	1.9	10	2.0	34	5.2	2	.27	23	2.7	17	1.9
13	11	2.3	13	2.6	35	6.0	5	.64	26	3.1	17	1.8
14	13	2.7	12	2.6	36	6.1	16	2.1	26	3.4	22	2.4
15	23	5.6	15	3.6	40	6.3	26	4.0	25	2.9	19	2.2
16	17	4.3	61	32	36	5.4	24	3.9	19	2.2	17	1.9
17	24	6.7	18	5.4	31	4.6	13	2.0	20	2.3	20	2.2
18	266	246	14	3.3	32	4.7	10	1.5	26	3.1	17	2.0
19	70	33	15	3.1	30	4.5	12	1.6	33	3.8	14	1.7
20	55	26	16	3.2	28	4.0	23	3.6	34	3.9	12	1.6
21	593	746	17	3.3	28	4.1	17	2.4	25	2.8	10	1.2
22	167	120	17	3.3	26	3.6	24	3.4	21	2.3	9	1.0
23	57	25	13	2.5	3	.37	18	2.4	17	1.9	10	1.2
24	123	94	8	1.6	13	2.0	13	1.7	14	1.5	12	1.4
25	164	151	4	.73	22	3.3	8	1.0	19	2.1	15	1.7
26	47	21	5	.95	26	3.7	6	.80	21	2.4	18	2.1
27	27	9.4	9	1.6	33	4.6	6	.79	20	2.3	22	2.6
28	20	6.3	2	.44	26	3.5	10	1.5	20	2.2	19	2.3
29	19	5.3	4	.71	32	5.0	11	1.6	14	1.5	15	1.7
30	17	4.8	7	1.3	15	2.3	15	2.2	17	1.8	31	3.7
31	---	---	80	22	---	---	36	5.9	14	1.6	---	---
MONTH	---	1661.70	---	128.03	---	123.67	---	55.83	---	80.30	---	58.80

TOTAL LOAD FOR YEAR: 23999.33 TONS.

05407920 KICKAPOO RIVER NEAR ROCKTON, WI

LOCATION.--LAT 43°36'46", LONG 90°37'34", IN SE 1/4 SW 1/4 SEC.9, T.13 N., R.2 W., VERNON COUNTY, HYDROLOGIC UNIT 07070006, AT NONRECORDING GAGE AT BRIDGE ON STATE HIGHWAY 131, AND 2.0 MI (3.2 KM) SOUTHWEST OF ROCKTON.

DRAINAGE AREA.--264 MI² (684 KM²), APPROXIMATELY.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--NOVEMBER 1971 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: NOVEMBER 1971 TO CURRENT YEAR.

SUSPENDED-SEDIMENT DISCHARGE: NOVEMBER 1971 TO CURRENT YEAR.

REMARKS.--SEDIMENT RECORDS ARE GOOD EXCEPT FOR WINTER PERIOD WHICH ARE FAIR. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR LESS THAN 5 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: MAXIMUM DAILY, 28.0°C AUG. 4, 1975; MINIMUM DAILY, 0.0°C ON MANY DAYS DURING WINTER PERIODS.

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 3,290 MG/L MAR. 26, 1976; MINIMUM DAILY MEAN, 1 MG/L SEPT. 24, 26, 27, OCT. 6, 1975. MAXIMUM OBSERVED, 4,020 MG/L MAR. 26, 1976; MINIMUM OBSERVED, 1 MG/L ON SEVERAL DAYS.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 14,700 TONS (13,300 TONNES) MAR. 7, 1973; MINIMUM DAILY, 0.30 TON (0.27 TONNE) SEPT. 26, 27, 1975.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: MAXIMUM DAILY, 25.5°C JULY 10; MINIMUM DAILY, 0.0°C ON MANY DAYS DURING WINTER PERIOD.

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 3,290 MG/L MAR. 26; MINIMUM DAILY MEAN, 1 MG/L OCT. 6.

MAXIMUM OBSERVED, 4,020 MG/L MAR. 26; MINIMUM OBSERVED, 1 MG/L OCT. 6.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 7,020 TONS (6,370 TONNES) MAR. 12; MINIMUM DAILY, 0.35 TON (0.32 TONNE) OCT. 6.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT , 1975												
22...	0925	118	450	8.2	7.0	10	4	260	16	58	29	2.1
NOV												
19...	0935	126	425	8.1	8.0	2	6	250	18	53	29	2.2
DEC												
17...	0830	161	440	7.4	.0	1	5	260	12	54	30	3.4
JAN , 1976												
28...	1030	119	480	7.5	.0	1	4	260	27	54	30	2.1
FEB												
25...	1130	170	425	7.3	1.5	7	15	220	9	47	26	2.8
MAR												
24...	1020	213	420	8.0	7.0	6	20	220	13	45	25	2.3
APR												
21...	0930	851	310	8.2	10.0	33	70	170	12	38	19	2.5
MAY												
18...	0945	201	440	7.4	11.5	5	7	270	9	46	26	2.1
JUN												
08...	1015	123	465	7.1	18.5	2	6	240	20	48	30	2.3
JUL												
20...	1045	142	450	7.4	19.5	--	13	--	--	--	--	--
28...	0820	108	370	7.9	21.0	8	26	240	24	48	28	2.0
AUG												
24...	1000	87	420	7.9	18.0	5	10	270	0	51	23	2.4
SEP												
22...	1045	95	440	8.4	10.5	3	5	230	1	50	26	2.3

WISCONSIN RIVER BASIN

05407920 KICKAPOO RIVER NEAR ROCKTON, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	PERCENT SODIUM	SODIUM AD-SORPTION RATIO	DIS-SOLVED POTASSIUM (KI) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT , 1975												
22...	2	.1	1.3	303	0	249	3.1	15	3.5	.5	4.7	261
NOV												
19...	2	.1	1.6	285	0	234	3.6	16	4.0	.0	9.0	253
DEC												
17...	3	.1	2.1	300	0	246	19	14	5.7	.1	12	271
JAN , 1976												
28...	2	.1	1.0	288	0	236	15	15	4.6	.1	11	254
FEB												
25...	3	.1	2.9	263	0	216	21	16	5.4	.1	10	152
MAR												
24...	2	.1	2.3	247	0	203	4.0	15	4.0	.1	9.4	225
APR												
21...	3	.1	3.0	196	0	161	2.0	12	4.6	.1	8.0	204
MAY												
18...	2	.1	2.3	260	0	213	17	14	3.7	.1	7.1	236
JUN												
08...	2	.1	1.5	272	0	223	35	12	3.1	.1	7.1	253
JUL												
20...	--	--	--	--	--	--	--	--	--	--	--	--
28...	2	.1	1.6	258	0	212	5.2	13	3.8	.1	7.5	226
AUG												
24...	2	.1	1.4	272	0	223	5.5	12	2.2	.1	7.9	248
SEP												
22...	2	.1	1.6	281	0	230	1.8	11	3.3	.1	10	246

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	TOTAL NITRATE IN BOTTOM MATERIAL (N) (MG/KG)	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	TOTAL NITRITE IN BOTTOM MATERIAL (N) (MG/KG)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT , 1975												
22...	265	.36	83.2	--	.30	1.3	--	--	.01	.03	--	--
NOV												
19...	255	.34	86.1	--	--	--	--	--	--	--	--	--
DEC												
17...	269	.37	118	--	--	--	--	--	--	--	--	--
JAN , 1976												
28...	264	.35	81.6	--	.94	4.2	--	--	.01	.03	--	--
FEB												
25...	244	.21	69.8	--	.86	3.8	--	--	.01	.03	--	--
MAR												
24...	229	.31	129	--	.85	3.8	--	--	.00	.00	--	--
APR												
21...	187	.28	469	.61	.63	2.8	43	.04	.01	.03	.0	.65
MAY												
18...	232	.32	128	--	.57	2.5	--	--	.01	.03	--	--
JUN												
08...	240	.34	84.0	--	.43	1.9	5.3	--	.03	.10	.0	--
JUL												
20...	--	--	--	.33	.33	1.5	--	.03	.04	.13	--	.36
28...	233	.31	65.9	--	.33	1.5	6.2	--	.02	.07	.0	--
AUG												
24...	236	.34	58.3	--	.41	1.8	--	--	.02	.07	--	--
SEP												
22...	245	.33	63.1	--	.45	2.0	--	--	.01	.03	--	--

05407920 KICKAPOO RIVER NEAR ROCKTON, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN ROT. MAT. (MG/KG)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	TOTAL AMMONIA NITRO-GEN IN BOTTOM MAT. (MG/KG)	DIS-SOLVED AMMONIA (NH4) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL NITRO-GEN IN BOTTOM MATERIAL (N) (MG/KG)
OCT , 1975													
22...	.31	--	--	--	--	--	--	--	.10	--	--	--	--
NOV													
19...	--	--	--	--	--	--	--	--	.19	--	--	--	--
DEC													
17...	--	--	--	--	--	--	--	--	.21	--	--	--	--
JAN , 1976													
28...	.95	--	--	--	--	--	--	--	.27	--	--	--	--
FEB													
25...	.87	--	--	--	--	--	--	--	.64	--	--	--	--
MAR													
24...	.85	--	--	--	--	--	--	--	.59	--	--	--	--
APR													
21...	.64	43	.09	59	.12	2.3	.46	2.4	.55	3.0	14	723	
MAY													
18...	.58	--	.01	--	.01	--	--	--	.58	--	--	--	--
JUN													
08...	.46	5.3	.06	2.7	.08	--	--	--	.35	--	--	--	120
JUL													
20...	.37	--	.05	--	.06	.80	.20	.85	.25	1.2	5.4	--	--
28...	.35	6.2	.03	5.2	.04	--	--	.50	--	--	--	--	90
AUG													
24...	.43	1.8	.02	1.4	.03	--	--	.40	--	--	--	--	64
SEP													
22...	.46	--	.01	--	.01	--	--	.28	--	--	--	--	--

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED-VED- PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO- PHOS-PHORUS (P) (MG/L)	DIS-SOLVED DRTHO- PHOS-PHORUS (PO4) (MG/L)	TOTAL PHOS-PHORUS IN BOT-TOM MA-TERIAL (MG/KG)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)	SUS-PENDED ORGANIC CARBON (C) (MG/L)
OCT , 1975											
22...	.05	--	--	--	--	--	10	60	8.2	--	--
NOV											
19...	.15	--	--	--	--	--	10	60	5.2	--	--
DEC											
17...	.11	.34	--	--	--	--	10	110	1.8	--	--
JAN , 1976											
28...	.06	.18	--	--	--	--	20	70	.9	--	--
FEB											
25...	.14	.43	--	--	--	--	40	100	--	--	--
MAR											
24...	.12	.37	--	--	--	--	30	100	14	--	--
APR											
21...	.43	1.3	.15	.07	.21	0	30	70	11	5.2	--
MAY											
18...	.10	.31	--	.04	.12	--	70	60	5.6	--	--
JUN											
08...	.12	.37	--	.01	.03	56	20	60	--	3.7	--
JUL											
20...	.16	--	.10	.06	.18	--	--	--	--	--	--
28...	.17	.52	--	.01	.03	81	50	50	--	4.0	--
AUG											
24...	.15	.46	--	.06	.18	45	40	40	13	12	1.2
SEP											
22...	.09	.28	--	.04	.12	--	60	30	2.4	--	--

WISCONSIN RIVER BASIN

05407920 KICKAPOO RIVER NEAR ROCKTON, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)
OCT , 1975							
22...	0925	118	10	0	0	0	0

DATE	TIME	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT , 1975								
22...		0	10	0	60	0	0	0

PESTICIDE ANALYSES

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TOTAL PCB (UG/L)	PCB IN BOTTOM MA-TERIAL (UG/KG)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDD (UG/L)
OCT , 1975										
22...	0925	116	.0	0	--	.00	.0	.0	0	.00
JAN , 1976										
28...	1030	119	.0	0	--	.00	.0	.0	0	.00
APR										
21...	0930	851	.0	0	.00	.00	.0	.0	0	.00
JUN										
08...	1015	123	.0	0	.00	.00	.0	.0	0	.00
JUL										
28...	0820	108	.0	0	.00	.00	.0	.0	64	.00
AUG										
24...	1000	87	.0	0	.00	.00	.0	.0	0	.00

DATE	TIME	DDD IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DIELDRIN (UG/L)	DI-FLDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)
OCT , 1975											
22...		.0	.00	.0	.00	.0	.00	.0	.00	.0	.00
JAN , 1976											
28...		.0	.00	.0	.00	.0	.00	.0	.00	.0	.00
APR											
21...		.0	.00	.0	.00	.0	.00	.0	.00	.0	.00
JUN											
08...		.0	.00	.0	.00	.0	.00	.0	.00	.0	.00
JUL											
28...		.0	.00	.0	.00	.0	.00	.0	.00	.0	.00
AUG											
24...		.0	.00	.0	.00	.0	.00	.0	.00	.0	.00

DATE	TIME	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL TOX-APHENE (UG/L)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
OCT , 1975											
22...		.0	.00	.0	.00	.0	0	0	.00	.00	.00
JAN , 1976											
28...		.0	.00	.0	.00	.0	0	0	.00	.00	.00
APR											
21...		.0	.00	.0	.00	.0	0	0	.00	.00	.00
JUN											
08...		.0	.00	.0	.00	.0	0	0	.00	.00	.00
JUL											
28...		.0	.00	.0	.00	.0	0	0	.00	.00	.00
AUG											
24...		.0	.00	.0	.00	.0	0	0	.00	.00	.00

05407920 KICKAPOO RIVER NEAR ROCKTON, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT , 1975												
07...	0900	112	--	8.0	9.0	3	10.0	91	.5	180	38	93
22...	0925	118	450	8.2	7.0	4	10.4	90	.5	8130	820	140
29...	1030	116	440	6.2	7.0	5	10.0	86	.9	--	100	120
NOV												
05...	1000	117	--	8.2	9.0	3	10.3	94	.6	550	140	200
10...	1050	271	--	7.9	8.5	5	9.2	82	7.0	849000	--	837000
19...	0935	126	425	8.1	8.0	6	11.2	99	.5	1400	1000	280
24...	1200	135	450	7.8	.5	6	13.2	96	.6	2200	8220	250
DEC												
02...	1045	170	--	8.0	.5	6	11.3	82	.7	4200	670	3600
09...	0900	123	--	--	--	5	--	--	1.1	1800	8270	200
17...	0830	161	440	7.4	.0	5	13.0	94	.7	1400	180	1500
22...	0930	139	460	7.6	.5	4	11.6	84	.6	410	868	160
29...	1000	129	--	7.7	.5	5	11.7	85	.4	1200	180	200
JAN , 1976												
06...	1035	109	--	7.8	.0	3	12.1	87	.8	230	62	62
13...	0915	120	400	7.4	.0	4	10.6	76	1.4	8360	91	72
20...	0940	119	--	7.5	.5	3	10.3	75	.8	1500	330	180
28...	1030	119	480	7.5	.0	4	11.8	85	1.1	360	63	53
FEB												
04...	1000	111	480	7.9	.5	2	10.4	75	.4	850	50	93
11...	1050	132	415	7.5	.5	15	10.0	72	2.7	1800	400	8000
19...	1045	198	400	7.9	1.5	15	11.6	87	2.7	1600	8360	4400
25...	1130	170	425	7.3	1.5	15	12.6	94	.9	430	890	2800
MAR												
03...	1050	160	380	7.6	.5	4	12.2	88	.9	8490	77	210
10...	1220	139	345	7.7	3.0	4	12.2	95	.5	260	86	65
17...	0800	196	390	7.7	.0	7	12.1	87	2.9	680	89	1000
24...	1020	213	420	8.0	7.0	20	10.6	91	.2	820	52	140
31...	1005	582	340	6.3	5.0	65	11.6	95	2.6	7200	670	6600
APR												
06...	1115	203	420	7.6	8.5	9	11.1	99	1.5	150	810	68
15...	1030	171	400	7.8	12.5	15	9.9	97	1.3	720	160	150
21...	0930	851	310	6.2	10.0	70	9.5	88	2.7	22000	4400	5200
27...	1030	313	415	7.9	8.0	15	11.1	98	.7	600	240	88
MAY												
04...	1100	199	460	7.9	7.0	6	12.0	103	1.0	8100	831	836
12...	1115	152	450	7.8	13.5	3	9.8	97	2.0	8260	37	60
18...	0945	201	440	7.4	11.5	7	9.8	94	2.1	1700	760	270
25...	1120	147	440	7.7	14.0	4	9.9	100	2.4	780	120	98
JUN												
02...	0930	146	440	7.3	15.5	8	9.6	100	2.2	2000	580	210
08...	1015	123	465	7.1	18.5	6	7.7	86	1.5	650	270	270
16...	0930	129	420	7.3	17.5	15	7.2	78	2.5	1500	240	480
22...	1135	119	420	8.2	18.0	9	8.5	93	1.4	800	220	240
28...	1100	116	450	8.4	20.0	10	8.0	92	2.0	600	480	500
JUL												
07...	1100	109	440	8.2	20.0	7	8.2	94	1.4	1500	380	1900
14...	1030	103	500	8.1	22.0	5	7.7	92	1.4	1900	879	310
20...	1045	142	450	7.4	19.5	13	--	--	2.5	830000	570	7000
28...	0820	108	370	7.9	21.0	26	7.1	83	2.0	16000	8320	2000
AUG												
05...	1300	100	420	8.2	19.0	5	7.7	87	1.7	89	1600	720
11...	1015	96	445	8.1	20.0	8	8.0	92	1.7	97	3100	510
18...	1050	92	430	8.1	18.0	6	8.0	88	1.3	3600	250	250
24...	1000	87	420	7.9	18.0	10	8.0	88	1.3	3700	--	400
31...	1030	86	--	8.0	16.5	15	8.0	85	1.8	87	2100	350
SEP												
08...	1040	84	450	8.3	16.5	9	8.4	89	1.3	9300	140	110
15...	1050	88	400	8.4	14.5	5	8.8	90	1.9	3600	77	160
22...	1045	95	440	8.4	10.5	5	9.2	87	--	1500	--	80
29...	1130	93	400	8.4	9.0	5	10.3	94	1.4	5500	93	230

DATE	TIME	DIS-SOLVED ORTHO-PHOS-PHATE (P04) (MG/L)	DIS-SOLVED DRTHO-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA (NH4) (MG/L)	DATE	TIME	DIS-SOLVED ORTHO-PHOS-PHATE (P04) (MG/L)	DIS-SOLVED DRTHO-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA (NH4) (MG/L)
APR , 1976						JUL , 1976					
06...	1115	.12	.04	.04	.05	07...	1100	.18	.06	.00	.00
15...	1030	.12	.04	.03	.04	14...	1030	.21	.07	.04	.05
21...	0930	.21	.07	.09	.12	20...	1045	.18	.06	.05	.06
27...	1030	.15	.05	.04	.05	28...	0820	.03	.01	.03	.04
MAY						AUG					
04...	1100	.09	.03	.01	.01	05...	1300	.18	.06	.02	.03
12...	1115	.06	.02	.01	.01	11...	1015	.18	.06	.02	.03
18...	0945	.12	.04	.01	.01	18...	1050	.18	.06	.03	.04
25...	1120	.09	.03	.01	.01	24...	1000	.18	.06	.02	.03
JUN						SEP					
02...	0930	.12	.04	.04	.05	31...	1030	.18	.06	.03	.04
08...	1015	.03	.01	.06	.08	08...	1040	.15	.05	.01	.01
16...	0930	.18	.06	.11	.14	15...	1050	.12	.04	.01	.01
22...	1135	.15	.05	.02	.03	22...	1045	.12	.04	.01	.01
28...	1100	.28	.09	.04	.05	29...	1130	.25	.08	.01	.01

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method			
Oct. 22, 1975	0925	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		<i>Scenedesmus</i>		0				
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Achnanthes</i>	21	2				
		<i>Amphora</i>		0				
		<i>Cocconeis</i>		0				
		<i>Cyclotella</i>	190	21				
		<i>Cymatopleura</i>		0				
		<i>Cymbella</i>	21	2				
		<i>Diatoma</i>	64	7				
		<i>Gomphonema</i>	43	5				
		<i>Navicula</i>	300	33				
		<i>Nitzschia</i>	230	26				
		<i>Surirella</i>	21	2				
		<i>Synedra</i>	21	2				
		CYANOPHYTA						
		Myxophyceae		0				
		<i>Oscillatoria</i>		0				
		EUGLENOPHYTA						
		Euglenophyceae		0				
		<i>Phacus</i>		0				
TOTAL		920						
Nov. 19, 1975	0935	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		<i>Scenedesmus</i>		0				
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Achnanthes</i>	120	6				
		<i>Amphora</i>		0				
		<i>Cocconeis</i>		0				
		<i>Cymatopleura</i>		0				
		<i>Cymbella</i>	64	3				
		<i>Diatoma</i>	120	6				
		<i>Gomphonema</i>	120	6				
		<i>Navicula</i>	1,200	65				
		<i>Nitzschia</i>	120	6				
		<i>Surirella</i>		0				
		<i>Synedra</i>	64	3				
		<i>Tabellaria</i>	64	3				
		CYANOPHYTA						
		Myxophyceae		0				
		<i>Lyngbya</i>		0				
		TOTAL		1,900				
		Dec. 17, 1975	0830	CHRYSOPHYTA				Grab sample
				Bacillariophyceae				
<i>Achnanthes</i>	21			7				
<i>Amphora</i>				0				
<i>Cyclotella</i>				0				
<i>Cymbella</i>	21			7				
<i>Diatoma</i>				0				
<i>Gomphonema</i>	41			13				
<i>Melosira</i>				0				
<i>Navicula</i>	120			40				
<i>Nitzschia</i>	83			27				
<i>Surirella</i>	21			7				
<i>Synedra</i>				0				
TOTAL				310				
Jan. 28, 1976	1030			CHRYSOPHYTA			Grab sample	
		Bacillariophyceae						
		<i>Amphora</i>		0				
		<i>Cyclotella</i>	20	6				
		<i>Cymatopleura</i>		0				
		<i>Cymbella</i>	20	6				
		<i>Diatoma</i>		0				
		<i>Gomphonema</i>	20	6				
		<i>Melosira</i>		0				
		<i>Meridion</i>		0				
		<i>Navicula</i>	240	67				
		<i>Nitzschia</i>	40	11				
		<i>Rhoicosphenia</i>		0				
		<i>Surirella</i>		0				
		<i>Synedra</i>	20	6				
		CYANOPHYTA						
		Myxophyceae		0				
<i>Oscillatoria</i>		0						
TOTAL		360						

05407920 KICKAPOO RIVER NEAR ROCKTON, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method			
Mar. 24, 1976	1020	CHRYSOPHYTA			Grab sample			
		Bacillariophyceae						
		Achnanthes	84	10				
		Amphora		0				
		Cocconeis	56	7				
		Cyclotella		0				
		Cymatopleura		0				
		Cymbella	56	7				
		Diatoma		0				
		Fragilaria		0				
		Frustulia		0				
		Gomphonema	84	10				
		Gyrosigma		0				
		Melosira		0				
		Meridion	28	3				
		Navicula	360	43				
		Nitzschia	84	10				
		Rhoicosphenia		0				
		Surirella	84	10				
		Synedra		0				
		CYANOPHYTA						
		Myxophyceae						
		Oscillatoria		0				
Apr. 21, 1976	0930	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		Ankistrodesmus	430	3				
		CHRYSOPHYTA						
		Bacillariophyceae						
		Achnanthes	430	3				
		Amphora	430	3				
		Caloneis		0				
		Cymbella	430	3				
		Fragilaria	430	3				
		Gomphonema	2,600	19				
		Navicula	3,500	25				
		Nitzschia	2,600	19				
		Surirella	2,000	22				
		TOTAL	14,000					
		May 18, 1976	0945	CHRYSOPHYTA				Grab sample
				Bacillariophyceae				
Achnanthes	50			2				
Cyclotella	380			15				
Cymbella	300			12				
Diatoma	25			1				
Gomphonema	150			6				
Navicula	660			27				
Neidium	25			1				
Nitzschia	830			34				
Surirella	25			1				
TOTAL	2,400							
June 8, 1976	1015			CHLOROPHYTA			Grab sample	
		Chlorophyceae						
		Chlamydomonas		0				
		Scenedesmus	170	5				
		CHRYSOPHYTA						
		Bacillariophyceae						
		Achnanthes	350	9				
		Amphora	87	2				
		Cocconeis		0				
		Cyclotella	170	5				
		Cymatopleura		0				
		Cymbella	260	7				
		Diatoma	43	1				
		Gomphonema	170	5				
		Melosira		0				
		Navicula	1,100	29				
		Nitzschia	1,200	33				
		Pinnularia		0				
		Rhoicosphenia		0				
		Surirella	43	1				
		Synedra	87	2				
		CYANOPHYTA						
		Myxophyceae						
Oscillatoria		0						
EUGLENOPHYTA								
Cryptophyceae								
Chroomonas		0						
Euglenophyceae								
Euglena	43	1						
TOTAL		3,700						

WISCONSIN RIVER BASIN

05407920 KICKAPOO RIVER NEAR ROCKTON, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Aug. 24, 1976	1000	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Chlamydomonas</i>		0	
		<i>Scenedesmus</i>		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	1,100	22	
		<i>Amphora</i>	290	5	
		<i>Cymatopleura</i>		0	
		<i>Cymbella</i>	290	5	
		<i>Diatoma</i>		0	
		<i>Gomphonema</i>	290	5	
		<i>Navicula</i>	2,900	54	
		<i>Neidium</i>		0	
		<i>Nitzschia</i>	290	5	
		<i>Synedra</i>	140	3	
		TOTAL	5,300		
Sept. 22, 1976	1045	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Scenedesmus</i>	93	6	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Asterionella</i>	70	5	
		<i>Cocconeis</i>	23	2	
		<i>Cyclotella</i>	23	2	
		<i>Cymatopleura</i>	93	6	
		<i>Diatoma</i>	120	8	
		<i>Epithemia</i>	140	9	
		<i>Gomphonema</i>	210	14	
		<i>Hantzschia</i>	23	2	
		<i>Navicula</i>	750	48	
		TOTAL	1,500		

05407920 KICKAPOO RIVER NEAR ROCKTON, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

BENTHIC MACROINVERTEBRATES

Date	Organism	Percent composition	Sampling method
Dec. 2, 1975	ARTHROPODA		Artificial substrate
	Crustacea		
	Amphipoda		
	Gammaridae	1	
	Insecta		
	Coleoptera		
	Elmidae	0	
	Diptera		
	Chironomidae	11	
	Rhagionidae	2	
	Tipulidae	4	
	Ephemeroptera		
	Heptageniidae	8	
	Plecoptera		
	Pteronarcidae	0	
	Trichoptera		
	Brachycentridae	2	
	Hydropsychidae	69	
	Limnephilidae	0	
	Polycentropodidae	1	
MOLLUSCA			
Gastropoda			
Ancyliidae	1		
June 28, 1976	ARTHROPODA		Artificial substrate
	Crustacea		
	Amphipoda		
	Gammaridae	3	
	Insecta		
	Coleoptera		
	Elmidae	0	
	Diptera		
	Chironomidae	6	
	Rhagionidae	0	
	Simuliidae	8	
	Ephemeroptera		
	Baetidae	48	
	Caenidae	2	
	Heptageniidae	11	
	Polymitarcidae	0	
	Siphonuridae	0	
	Plecoptera		
	Perlidae	0	
	Pteronarcidae	0	
Odonata			
Gomphidae	0		
Trichoptera			
Hydropsychidae	18		
MOLLUSCA			
Gastropoda			
Ancyliidae	0		
July 20, 1976	ARTHROPODA		Artificial substrate
	Crustacea		
	Amphipoda		
	Gammaridae	9	
	Insecta		
	Diptera		
	Chironomidae	13	
	Simuliidae	11	
	Ephemeroptera		
	Baetidae	31	
	Caenidae	1	
	Heptageniidae	25	
	Tricorythidae	1	
	Trichoptera		
	Hydropsychidae	9	
	MOLLUSCA		
	Gastropoda		
Ancyliidae	1		

WISCONSIN RIVER BASIN

05407920 KICKAPOO RIVER NEAR ROCKTON, WI--CONTINUED

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUS. SED. FALL DIAM.	SUS. SED. SIEVE DIAM.									
			% FINER THAN .002 MM	% FINER THAN .004 MM	% FINER THAN .008 MM	% FINER THAN .016 MM	% FINER THAN .031 MM	% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM	% FINER THAN 1.00 MM	
FEB , 1976													
18...	1115	193	14	20	26	36	75	79	81	87	97	100	
MAR 31...	1005	582	23	32	40	52	80	89	94	99	100	--	
APR 21...	0930	851	18	24	28	37	59	72	79	88	98	100	
JUL 20...	1045	142	30	37	45	57	68	88	94	100	--	--	

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BED MAT. SIEVE DIAM.						
			% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM	% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM
JAN , 1976									
28...	1030	119	--	2	11	70	98	99	100
APR 21...	0930	851	12	28	66	95	99	100	--
JUN 08...	1015	123	3	10	41	94	99	100	--
JUL 20...	1045	142	3	19	62	90	99	100	--
AUG 24...	1000	87	--	1	6	68	96	99	100

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976 ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.5	9.5	0.0	1.5	1.5	2.0	7.0	9.0	18.5	---	18.5	19.0
2	10.5	7.0	0.5	---	1.5	3.0	7.0	9.5	20.0	19.0	22.0	18.0
3	12.0	10.5	0.5	1.0	1.5	1.5	8.0	9.0	19.5	21.0	20.0	20.0
4	10.0	12.0	1.5	0.5	1.0	2.0	7.0	12.0	18.0	21.5	19.0	20.0
5	13.5	10.5	3.5	1.0	0.5	3.0	11.0	9.5	21.0	23.5	19.5	15.5
6	14.0	12.5	0.5	0.0	0.5	2.0	8.5	12.5	21.0	22.0	19.0	16.5
7	13.5	11.5	1.0	0.0	0.5	1.0	12.0	12.0	22.0	22.0	16.0	20.0
8	14.0	11.0	2.0	---	1.0	3.0	11.5	9.5	22.0	20.5	16.5	20.0
9	14.5	10.0	3.0	0.0	1.0	3.5	11.0	12.5	23.0	23.0	19.0	18.0
10	12.5	9.5	2.5	0.0	1.5	5.5	9.5	16.5	23.0	25.5	22.0	19.0
11	12.5	8.0	4.5	0.5	2.0	5.0	7.0	17.0	22.5	24.0	20.0	16.0
12	12.0	5.5	4.0	2.0	1.5	3.0	10.5	16.0	24.5	24.0	22.0	13.0
13	12.0	4.0	3.5	2.0	1.5	2.5	12.5	13.5	24.5	22.0	21.0	18.0
14	14.0	3.5	6.0	1.0	1.0	2.5	13.5	18.0	24.0	24.0	19.0	18.5
15	12.0	3.5	2.0	---	2.0	3.5	14.5	---	23.0	22.0	---	16.0
16	10.0	8.5	1.0	0.5	---	2.5	12.5	13.0	24.0	20.0	17.0	15.5
17	10.5	8.0	---	1.0	2.0	3.0	15.0	14.5	20.0	19.0	17.5	16.0
18	6.0	8.5	0.0	0.5	1.5	6.0	14.5	15.5	18.0	17.0	21.0	15.0
19	6.0	10.5	1.5	2.0	3.5	6.0	14.0	17.0	18.5	20.0	22.0	14.0
20	9.5	9.5	1.0	1.5	3.5	6.5	11.0	18.5	16.0	20.0	20.0	15.0
21	9.0	6.0	1.0	1.5	---	4.5	10.0	20.0	22.0	21.0	20.0	14.0
22	11.5	3.5	2.0	2.0	0.5	6.0	11.0	16.5	20.5	20.0	19.5	13.0
23	---	2.0	2.0	1.5	1.5	7.5	9.5	17.0	20.0	20.0	22.5	12.0
24	15.0	0.5	1.0	1.0	3.0	9.5	8.0	16.0	18.0	20.0	20.0	11.0
25	10.0	1.0	1.0	1.0	4.5	9.5	6.0	17.0	20.0	19.5	20.0	10.0
26	6.0	1.5	2.0	1.0	5.0	8.0	10.5	19.0	18.5	22.0	21.5	---
27	10.0	0.5	1.0	1.5	5.0	7.0	8.0	19.0	22.5	22.0	22.0	12.0
28	10.5	1.5	1.0	0.0	2.0	5.0	12.0	18.0	22.0	22.0	20.0	11.0
29	8.5	1.5	2.5	1.5	3.0	8.5	12.5	17.0	18.0	22.0	17.5	12.0
30	7.5	1.5	2.0	1.0	---	7.5	13.0	16.5	19.0	23.0	18.0	13.5
31	9.5	---	1.5	1.0	---	5.5	---	15.5	---	20.0	20.0	---

05407920 KICKAPOO RIVER NEAR ROCKTON, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	123	4	1.3	113	9	2.9	177	70	36
2	118	4	1.3	112	12	3.5	166	23	11
3	118	5	1.4	113	11	3.4	163	27	12
4	117	2	.69	113	12	3.8	160	42	18
5	117	2	.63	110	8	2.3	165	27	12
6	116	1	.35	112	19	5.7	161	26	11
7	115	7	2.1	115	33	10	136	14	5.1
8	116	10	3.2	114	25	7.8	140	12	4.5
9	119	8	2.5	132	37	14	139	14	5.2
10	117	7	2.2	246	152	104	136	13	4.8
11	117	6	2.0	150	66	27	136	13	4.8
12	119	8	2.6	134	30	11	130	14	4.9
13	121	11	3.5	129	10	3.6	131	16	5.7
14	121	8	2.7	123	7	2.5	171	76	35
15	121	7	2.3	124	9	2.9	211	202	115
16	118	6	1.9	124	9	3.1	149	29	12
17	118	7	2.4	122	17	5.6	150	16	6.5
18	117	10	3.1	120	16	5.3	150	4	1.6
19	118	9	2.8	119	21	6.7	140	24	9.1
20	120	6	1.8	128	8	2.9	140	32	12
21	115	5	1.6	170	48	23	140	22	8.4
22	114	6	1.9	141	14	5.7	140	30	11
23	115	6	1.9	126	6	2.1	130	26	9.1
24	119	7	2.1	128	11	4.0	130	10	3.5
25	130	16	5.5	123	8	2.8	130	13	4.6
26	117	9	3.0	159	51	24	130	31	11
27	115	5	1.6	206	31	17	130	85	30
28	114	7	2.1	191	18	9.4	130	68	24
29	110	4	1.2	225	117	97	130	23	8.0
30	110	2	.62	414	369	441	130	40	14
31	112	7	2.2	---	---	---	130	48	17
TOTAL	3637	---	64.49	4436	---	854.0	4501	---	466.8

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	130	61	21	110	8	2.4	196	79	43
2	120	46	15	110	6	1.8	169	33	15
3	120	49	16	110	8	2.4	160	27	13
4	110	52	15	110	12	3.6	160	26	13
5	110	88	26	110	10	3.0	150	20	9.3
6	110	14	4.2	110	7	2.1	150	21	8.9
7	120	12	3.9	110	6	1.8	150	13	6.2
8	120	9	2.9	110	8	2.4	146	21	8.2
9	120	14	4.5	120	6	1.9	149	21	8.3
10	120	18	5.9	120	7	2.3	147	26	10
11	120	22	7.1	130	16	5.6	197	57	35
12	120	10	3.2	150	18	7.3	1390	1610	7020
13	120	11	3.6	320	114	98	831	706	2350
14	120	8	2.6	250	63	43	365	219	221
15	120	9	2.9	350	554	524	320	118	105
16	120	10	3.2	890	116	278	239	71	47
17	120	7	2.3	252	89	61	193	45	23
18	120	5	1.6	226	97	59	316	102	105
19	120	6	1.9	193	84	45	869	508	1470
20	120	8	2.4	168	54	25	1170	1090	3640
21	120	7	2.3	163	38	17	396	343	414
22	110	5	1.5	145	34	13	232	109	69
23	110	6	1.8	146	73	29	219	69	41
24	110	7	2.1	165	97	43	220	72	43
25	110	6	1.8	179	67	32	210	55	31
26	110	6	1.8	271	139	115	649	3290	6750
27	110	7	2.1	666	566	1060	377	600	657
28	120	15	4.9	697	935	1970	263	170	121
29	120	7	2.3	314	223	203	340	210	199
30	120	7	2.3	---	---	---	760	741	1630
31	110	6	1.8	---	---	---	515	345	501
TOTAL	3630	---	169.9	6795	---	4651.6	11648	---	25606.9

WISCONSIN RIVER BASIN

05407920 KICKAPOO RIVER NEAR ROCKTON, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	381	176	184	234	50	32	152	53	22
2	306	123	99	216	50	29	135	33	12
3	263	97	69	212	39	23	129	38	13
4	240	71	46	199	24	13	126	39	13
5	220	58	35	193	28	15	122	38	13
6	207	51	29	183	29	15	121	37	12
7	194	52	27	174	21	10	118	37	12
8	184	52	26	169	31	14	113	31	9.4
9	177	36	17	167	28	13	112	35	11
10	181	33	16	163	26	11	111	36	11
11	190	36	19	157	18	7.4	110	44	13
12	172	24	11	153	17	6.9	111	37	11
13	169	21	9.3	158	26	11	125	50	17
14	168	23	11	168	22	9.9	133	47	17
15	207	81	47	171	28	13	123	50	16
16	206	87	49	312	113	99	118	63	20
17	210	75	44	247	49	34	117	57	18
18	450	308	406	190	22	11	116	48	15
19	395	275	310	174	18	8.4	117	42	13
20	303	114	95	165	20	8.7	111	48	15
21	685	477	963	157	19	8.2	108	39	11
22	548	412	655	152	26	10	107	40	11
23	362	161	159	151	117	48	108	34	10
24	464	226	306	148	38	15	111	32	9.6
25	617	341	604	142	15	5.7	118	47	15
26	372	116	118	139	17	6.4	111	51	15
27	298	84	68	137	16	6.0	105	36	10
28	265	60	43	135	18	6.4	104	39	11
29	243	52	34	136	20	7.3	124	59	21
30	237	58	37	145	29	11	128	57	20
31	---	---	---	168	68	31	---	---	---
TOTAL	8914	---	4536.3	5415	---	539.3	3544	---	417.0
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	108	38	11	110	33	9.8	94	122	31
2	102	34	9.3	100	20	5.4	92	27	6.7
3	100	28	7.5	96	16	4.1	90	35	8.5
4	97	25	6.5	94	22	5.6	88	40	9.5
5	96	23	6.1	100	64	17	86	32	7.4
6	100	23	6.2	110	18	5.3	88	36	8.6
7	100	28	7.6	100	32	8.6	86	31	7.2
8	110	33	9.8	96	32	8.3	84	28	6.4
9	100	20	5.4	94	22	5.6	84	26	5.9
10	100	14	3.8	96	28	7.3	84	22	5.0
11	96	22	5.8	98	43	11	86	32	7.4
12	98	18	4.8	94	35	8.9	88	36	8.6
13	96	15	3.9	96	18	4.7	88	24	5.7
14	100	21	5.7	110	223	66	86	32	7.4
15	110	54	16	98	100	26	88	25	5.9
16	120	35	11	92	14	3.5	90	30	7.3
17	120	21	6.8	92	28	7.0	90	27	6.6
18	110	28	8.3	92	32	7.9	90	18	4.4
19	110	39	12	92	36	8.9	94	34	8.6
20	127	67	23	91	39	9.6	110	30	8.9
21	144	25	9.7	90	32	7.8	98	20	5.3
22	127	17	5.8	89	62	15	96	14	3.6
23	120	4	1.3	87	26	6.1	94	16	4.1
24	110	46	14	84	48	11	92	14	3.5
25	110	47	14	87	85	20	90	18	4.4
26	100	36	9.7	104	44	12	91	27	6.6
27	110	21	6.2	94	78	20	96	36	9.3
28	110	53	16	89	22	5.3	96	13	3.4
29	120	24	7.8	82	27	6.0	94	17	4.3
30	110	26	7.7	90	86	21	94	15	3.8
31	120	112	36	92	47	12	---	---	---
TOTAL	3385	---	298.7	2939	---	366.7	2727	---	215.3
YEAR	61571.0	---	38186.99						

05408000 KICKAPOO RIVER AT LA FARGE, WI

LOCATION.--LAT 43°34'27", LONG 90°38'35", ON EAST-WEST QUARTER SECTION LINE IN W 1/2 SEC.29, T.13 N., R.2 W., VERNON COUNTY, HYDROLOGIC UNIT 07070006, ON LEFT BANK 10 FT (3 M) UPSTREAM FROM BRIDGE ON STATE HIGHWAY 82, IN LA FARGE, 0.3 MI (0.5 KM) UPSTREAM FROM OTTER CREEK, AND 1.3 MI (2.1 KM) DOWNSTREAM FROM POWERPLANT.

DRAINAGE AREA.--266 MI² (687 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--OCTOBER 1938 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1388: 1951(M), 1954(M). WSP 1436: 1944-45(M), 1946, 1948, 1950(M).

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 782.00 FT (238.354 M) ABOVE MEAN SEA LEVEL, ADJUSTMENT OF 1912. PRIOR TO DEC. 4, 1939, NONRECORDING GAGE ON HIGHWAY BRIDGE AT SAME DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS AND THOSE FROM JULY 15 TO SEPT. 30, WHICH ARE FAIR.

AVERAGE DISCHARGE.--38 YEARS, 170 FT³/S (4.814 M³/S), 8.68 IN/YR (220 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 9,910 FT³/S (281 M³/S) FEB. 9, 1966, GAGE HEIGHT, 13.67 FT (4.167 M); MINIMUM, 1.8 FT³/S (0.051 M³/S) MAR. 24, 1951; MINIMUM DAILY, 36 FT³/S (1.02 M³/S) NOV. 3, 1939.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 1,910 FT³/S (54.1 M³/S) MAR. 13, GAGE HEIGHT, 9.14 FT (2.786 M); NO OTHER PEAKS ABOVE BASE DISCHARGE OF 1,700 FT³/S (48.1 M³/S); MINIMUM DAILY, 82 FT³/S (2.32 M³/S) AUG. 29.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(SHIFTING-CONTROL METHOD USED JUNE 15 TO SEPT. 30; STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 26-29, DEC. 8, DEC. 17 TO FEB. 15, MAR. 3-7.)

1.7	80	4.0	446
2.0	112	6.0	917
3.0	257	8.0	1,500

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	113	206	130	110	214	410	237	159	111	110	94
2	116	112	167	120	110	167	287	220	139	103	100	92
3	115	113	163	120	110	160	261	212	130	101	96	90
4	113	113	160	110	110	160	238	203	126	98	94	86
5	113	111	165	110	110	150	215	193	122	98	100	86
6	112	111	161	110	110	150	203	187	121	100	110	88
7	112	114	136	120	110	150	190	176	118	100	100	86
8	112	114	140	120	110	150	179	170	113	110	96	84
9	115	119	139	120	120	149	171	167	113	100	94	84
10	114	237	136	120	120	144	170	164	111	100	96	84
11	112	167	136	120	130	165	185	159	110	98	98	86
12	113	135	130	120	150	1010	167	153	111	98	94	88
13	116	131	131	120	320	1180	162	157	120	96	96	88
14	116	124	171	120	250	386	161	168	133	100	110	86
15	116	122	211	120	350	336	184	160	126	110	98	88
16	114	124	149	120	890	261	208	284	118	120	92	90
17	113	122	150	120	252	189	191	272	118	120	92	90
18	111	120	150	120	226	251	352	198	115	110	92	90
19	111	119	140	120	200	642	461	176	116	110	92	94
20	119	122	140	120	173	1320	282	167	112	127	91	110
21	111	163	140	120	163	525	579	159	106	144	90	98
22	114	150	140	110	149	247	651	152	106	127	89	96
23	115	127	130	110	145	219	379	152	107	120	87	94
24	116	127	130	110	160	222	404	149	108	110	84	92
25	130	124	130	110	173	214	647	144	118	110	87	90
26	119	120	130	110	219	565	407	140	113	100	104	91
27	114	120	130	110	561	436	311	136	106	110	94	96
28	114	130	130	120	799	277	277	135	104	110	89	96
29	111	180	130	120	363	299	247	135	113	120	82	144
30	110	430	130	120	---	654	237	143	136	110	90	94
31	112	---	130	110	---	615	---	161	---	120	92	---
TOTAL	3552	4214	4531	3630	6793	11607	8816	5420	3550	3361	2939	2777
MEAN	115	140	146	117	234	374	294	175	118	109	94.8	92.6
MAX	130	430	211	130	890	1320	651	284	159	144	110	144
MIN	110	111	130	110	110	144	161	135	104	96	82	84
CFSM	.43	.53	.55	.44	.88	1.41	1.11	.66	.44	.41	.36	.35
IN.	.50	.59	.63	.51	.95	1.62	1.23	.76	.50	.47	.41	.39

CAL YR 1975 TOTAL 61054 MEAN 167 MAX 1570 MIN 102 CFSM .63 IN 8.54
WTR YR 1976 TOTAL 61229 MEAN 167 MAX 1320 MIN 82 CFSM .63 IN 8.56

NOTE.--BACKWATER FROM CONSTRUCTION JULY 15 TO SEPT. 30.

WISCONSIN RIVER BASIN

0540B000 KICKAPOO RIVER AT LA FARGE, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1971 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: OCTOBER 1971 TO CURRENT YEAR.
 WATER TEMPERATURES: JULY 1971 TO CURRENT YEAR.
 TURBIDITY: OCTOBER 1971 TO CURRENT YEAR.
 SUSPENDED-SEDIMENT DISCHARGE: OCTOBER 1971 TO CURRENT YEAR.

INSTRUMENTATION.--TEMPERATURE RECORDER SINCE DECEMBER 1, 1973.

REMARKS.--SEDIMENT RECORDS ARE GOOD EXCEPT FOR WINTER PERIOD AND DURING BRIDGE CONSTRUCTION JULY 6 TO SEPTEMBER 30, 1976 WHICH ARE FAIR. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR LESS THAN 5 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: MAXIMUM DAILY, 550 MICROMHOS FEB. 25, 1974; MINIMUM DAILY, 120 MICROMHOS MAR. 4, 1974.
 WATER TEMPERATURES: MAXIMUM, 27.0°C JULY 11, 1976; MINIMUM, 0.0°C ON MANY DAYS DURING WINTER PERIODS.
 TURBIDITY: MAXIMUM DAILY, 300 JTU AUG. 27, 1974; MINIMUM DAILY, 0 JTU MAY 4-7, 1973.
 SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 2,880 MG/L MAR. 7, 1973; MINIMUM DAILY MEAN, 0 MG/L DEC. 25, 1971. MAXIMUM OBSERVED, 3,280 MG/L MAR. 26, 1976; MINIMUM OBSERVED, 2 MG/L ON SEVERAL DAYS.
 SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 10,500 TONS (9,520 TONNES) APR. 13, 1972; MINIMUM DAILY, 0 TON (0 TONNE) DEC. 25, 1971.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: MAXIMUM DAILY, 505 MICROMHOS DEC. 19; MINIMUM DAILY, 140 MICROMHOS MAR. 13.
 WATER TEMPERATURES: MAXIMUM, 27.0°C JULY 11; MINIMUM, 0.0°C ON MANY DAYS DURING WINTER PERIOD.
 TURBIDITY: MAXIMUM DAILY, 150 JTU MAR. 26, 27; MINIMUM DAILY, 2 JTU DEC. 3, JAN. 17, JULY 8, 9.
 SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 1,570 MG/L MAR. 26; MINIMUM DAILY MEAN, 4 MG/L JAN. 26. MAXIMUM OBSERVED, 3,280 MG/L MAR. 26; MINIMUM OBSERVED, 2 MG/L ON SEVERAL DAYS.
 SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 4,740 TONS (4,300 TONNES) MAR. 20; MINIMUM DAILY, 1.2 TONS (1.1 TONNES) JAN. 26.

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

BENTHIC MACROINVERTEBRATES

Date	Organism	Percent composition	Sampling method
Dec. 2, 1975	ARTHROPODA		Artificial substrate
	Crustacea		
	Amphipoda		
	Gammaridae	0	
	Decapoda		
	Astacidae	0	
	Insecta		
	Diptera		
	Chironomidae	21	
	Rhagionidae	6	
	Tipulidae	3	
	Ephemeroptera		
	Heptageniidae	35	
	Hemiptera		
	Corixidae	0	
	Plecoptera		
	Pteronarcidae	1	
Trichoptera			
Brachycentridae	2		
Hydropsychidae	27		
Limnephilidae	1		
MOLLUSCA			
Gastropoda			
Amnicolidae	0		
Ancylidae	4		
June 28, 1976	AMPHIPODA		Artificial substrate
	Crustacea		
	Amphipoda		
	Gammaridae	1	
	Insecta		
	Diptera		
	Chironomidae	8	
	Simuliidae	6	
	Ephemeroptera		
	Baetidae	14	
	Caenidae	1	
	Heptageniidae	10	
	Siphonuridae	23	
	Hemiptera		
	Veliidae	0	
	Odonata		
	Calopterygidae	0	
	Plecoptera		
	Perlidae	0	
	Trichoptera		
Hydropsychidae	36		
MOLLUSCA			
Gastropoda			
Ancylidae	0		

05408000 KICKAPOO RIVER AT LA FARGE, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

BENTHIC MACROINVERTEBRATES

Date	Organism	Percent composition	Sampling method
July 20, 1976	ARTHROPODA		Artificial substrate
	Insecta		
	Diptera		
	Chironomidae	23	
	Simuliidae	2	
	Ephemeroptera		
	Baetidae	13	
	Heptageniidae	44	
	Trichoptera		
	Hydropsychidae	17	
MOLLUSCA			
Gastropoda			
Ancylidae	1		

WATER QUALITY DATA

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Dec. 2, 1975	1605	0.5	167	-	July 22, 1976	1110	20.0	122	450
Jan. 13, 1976	1105	0.0	120	-	July 27, 1976	1630	21.0	108	460
Feb. 18, 1976	0810	1.5	188	350	Aug. 10, 1976	1430	22.0	94.9	440
Apr. 2, 1976	1030	5.5	323	300	Aug. 23, 1976	1200	21.0	84.0	420
May 13, 1976	1145	15.0	160	420	Sept. 29, 1976	1100	9.5	93.8	420
June 16, 1976	0735	18.5	116	440					

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUSPENDED SED. FALL DIAM.	SUSPENDED SED. FALL DIAM.	SUSPENDED SED. FALL DIAM.
					% FINER THAN .002 MM	% FINER THAN .004 MM	% FINER THAN .008 MM
FEB. 1976							
18...	1215	230	--	--	24	34	46
MAR							
31...	0845	593	--	--	26	34	45
APR							
21...	1700	838	2810	6360	6	7	9
JUL							
20...	0945	142	231	89	39	48	60

DATE	TIME	SUSPENDED SED. FALL DIAM. % FINER THAN .016 MM	SUSPENDED SED. FALL DIAM. % FINER THAN .031 MM	SUSPENDED SED. FALL DIAM. % FINER THAN .062 MM	SUSPENDED SED. FALL DIAM. % FINER THAN .125 MM	SUSPENDED SED. FALL DIAM. % FINER THAN .250 MM	SUSPENDED SED. FALL DIAM. % FINER THAN .500 MM	SUSPENDED SED. FALL DIAM. % FINER THAN 1.00 MM
18...	56	87	93	94	97	99	100	
MAR								
31...	58	83	92	95	99	100	--	
APR								
21...	12	19	22	25	41	88	100	
JUL								
20...	75	93	98	100	--	--	--	

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BED MAT. SIEVE DIAM. .062 MM	BED MAT. SIEVE DIAM. .125 MM	BED MAT. SIEVE DIAM. .250 MM	BED MAT. SIEVE DIAM. .500 MM	BED MAT. SIEVE DIAM. 1.00 MM	BED MAT. SIEVE DIAM. 2.00 MM	BED MAT. SIEVE DIAM. 4.00 MM	BED MAT. SIEVE DIAM. 8.00 MM	BED MAT. SIEVE DIAM. 16.0 MM	BED MAT. SIEVE DIAM. 32.0 MM
			% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN
JAN. 1976												
28...	0950	120	1	3	12	56	94	97	98	98	99	100
APR												
20...	1130	279	5	16	77	97	98	99	99	100	--	--
JUN												
07...	1130	125	1	2	12	80	86	87	88	90	96	100
JUL												
20...	0945	142	3	6	27	95	99	99	99	100	--	--
AUG												
23...	1200	85	1	2	15	46	62	65	70	82	92	100

WISCONSIN RIVER BASIN

05408000 KICKAPOO RIVER AT LA FARGE, WI--CONTINUED

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	435	455	385	440	445	---	365	420	400	---	410	440
2	445	450	445	440	445	405	395	415	440	425	430	430
3	455	455	450	445	465	425	---	420	435	430	420	440
4	455	450	450	465	450	440	410	440	430	430	410	460
5	440	455	440	495	450	440	420	425	---	435	410	450
6	440	450	450	490	445	440	425	440	450	440	425	455
7	450	455	450	455	445	450	425	425	440	430	425	435
8	450	455	445	450	450	445	440	430	440	430	430	435
9	445	450	455	465	445	450	440	425	445	445	430	450
10	445	400	455	470	425	440	430	430	445	430	425	440
11	445	430	450	460	420	425	440	425	445	430	410	440
12	---	455	455	455	410	200	435	435	445	435	425	440
13	440	450	450	445	320	140	440	435	440	430	410	430
14	440	455	445	440	310	260	440	440	440	440	415	425
15	440	455	400	---	350	295	420	450	440	440	---	450
16	450	450	430	445	---	325	---	415	450	420	420	450
17	440	455	---	450	295	380	440	410	440	440	425	450
18	455	455	500	450	350	385	415	430	445	---	425	445
19	445	460	505	460	390	245	345	440	450	440	425	440
20	450	450	485	445	410	155	400	440	445	420	430	440
21	450	440	455	445	---	220	320	440	445	420	420	405
22	450	445	455	440	430	355	320	440	450	425	420	425
23	---	450	450	440	430	400	375	440	450	435	425	450
24	445	---	445	440	450	400	390	440	450	440	425	420
25	455	455	445	445	430	405	330	435	450	445	420	420
26	455	470	455	440	400	260	380	435	445	425	420	425
27	450	460	455	450	220	310	400	440	430	420	430	425
28	440	455	390	465	195	380	415	435	430	415	430	425
29	440	450	450	445	250	315	415	440	420	420	430	445
30	450	360	440	440	---	395	420	440	420	425	---	450
31	455	---	440	440	---	310	---	440	---	415	420	---
MONTH	447	447	448	452	390	350	403	433	440	430	421	438

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.5	10.0	11.0	9.5	8.0	8.5	2.0	0.0	0.5	0.0	0.0	0.0
2	10.0	8.5	9.5	8.0	7.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0
3	11.0	8.0	9.5	9.5	7.5	8.5	0.0	0.0	0.0	0.0	0.0	0.0
4	12.5	9.5	11.0	11.0	9.5	10.0	0.0	0.0	0.0	0.0	0.0	0.0
5	13.0	11.0	11.5	10.0	9.0	9.5	2.0	0.0	1.0	0.0	0.0	0.0
6	12.0	10.0	11.0	11.0	9.5	10.5	2.0	0.5	1.5	0.0	0.0	0.0
7	12.0	9.5	11.0	11.5	11.0	11.5	1.5	0.0	0.0	0.0	0.0	0.0
8	12.5	10.5	11.5	11.0	10.0	10.5	1.0	0.0	0.5	0.0	0.0	0.0
9	14.0	12.0	12.5	10.0	9.0	9.5	1.5	0.5	1.0	0.0	0.0	0.0
10	12.0	11.0	11.5	9.5	7.5	8.5	1.5	1.0	1.5	0.0	0.0	0.0
11	11.5	9.5	10.5	7.5	5.5	6.0	1.5	1.5	1.5	0.0	0.0	0.0
12	12.0	9.5	10.5	5.5	4.5	5.0	1.5	0.5	1.0	0.0	0.0	0.0
13	15.0	11.5	13.5	4.5	2.5	3.5	3.0	1.0	2.0	0.0	0.0	0.0
14	16.0	14.0	15.0	2.5	1.0	1.5	5.0	3.0	4.5	0.0	0.0	0.0
15	14.5	10.5	13.0	3.0	1.0	2.0	4.5	1.0	2.5	0.0	0.0	0.0
16	10.5	8.5	9.5	4.5	2.5	3.5	1.0	0.0	0.0	0.0	0.0	0.0
17	9.5	7.5	8.5	6.0	4.0	5.0	1.0	0.0	0.0	0.0	0.0	0.0
18	8.5	6.5	7.5	7.0	5.5	6.5	0.0	0.0	0.0	0.0	0.0	0.0
19	7.5	5.5	6.5	9.0	7.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0
20	8.0	6.0	7.0	9.0	8.0	8.5	0.0	0.0	0.0	0.0	0.0	0.0
21	9.0	7.0	8.0	8.0	4.5	6.0	0.0	0.0	0.0	0.0	0.0	0.0
22	10.0	7.5	9.0	4.5	1.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0
23	13.0	9.5	11.5	1.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
24	14.5	12.5	13.5	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
25	12.5	9.0	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	9.0	7.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	9.5	7.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	10.5	9.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	9.0	6.0	7.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	6.5	5.0	5.5	2.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
31	8.5	6.0	7.0	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	16.0	5.0	10.0	11.5	0.0	5.0	5.0	0.0	0.5	0.0	0.0	0.0

05408000 KICKAPOO RIVER AT LA FARGE, WI--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.0	0.0	0.0	2.5	0.5	1.5	6.0	5.0	5.5	11.5	10.5	11.0
2	0.0	0.0	0.0	0.5	0.5	0.5	8.0	5.0	6.5	10.5	9.0	10.0
3	0.0	0.0	0.0	1.0	0.5	0.5	9.0	7.0	8.0	9.0	8.0	8.5
4	0.0	0.0	0.0	0.5	0.0	0.5	9.0	7.0	8.0	10.5	7.0	9.0
5	0.0	0.0	0.0	1.0	0.0	0.5	9.0	6.5	8.0	13.0	10.5	12.0
6	0.0	0.0	0.0	1.0	0.0	0.5	10.0	7.5	9.0	12.0	10.5	11.5
7	0.5	0.0	0.0	1.5	0.0	1.0	10.5	8.0	9.0	12.5	10.0	11.5
8	0.5	0.5	0.5	1.5	0.0	1.0	10.0	7.5	9.0	13.0	10.0	11.5
9	0.5	0.5	0.5	2.5	1.0	2.0	10.0	7.5	9.0	16.0	12.5	14.0
10	0.5	0.5	0.5	4.5	2.5	3.0	9.5	9.0	9.0	17.0	14.5	15.5
11	0.5	0.5	0.5	4.5	2.0	3.0	9.5	7.0	8.5	16.5	14.5	15.5
12	0.5	0.5	0.5	3.5	0.5	2.0	9.5	6.5	8.0	16.0	13.0	14.5
13	0.5	0.5	0.5	2.0	0.5	1.0	10.5	7.5	9.0	15.5	13.5	14.5
14	0.5	0.5	0.5	2.5	1.0	2.0	12.5	10.0	11.0	16.0	12.5	14.5
15	0.5	0.5	0.5	3.0	1.5	2.5	14.0	12.5	13.0	16.0	14.5	15.0
16	4.5	0.5	2.0	3.0	1.5	2.0	15.5	13.5	14.5	14.5	13.5	14.0
17	2.0	1.5	1.5	2.5	0.5	1.5	15.5	15.0	15.5	15.0	12.5	14.0
18	2.5	1.5	2.0	4.5	2.0	3.5	15.0	14.0	14.5	16.5	13.5	15.0
19	2.0	0.5	1.0	5.5	3.0	4.5	14.0	12.0	12.5	17.5	14.5	16.0
20	2.5	2.0	2.0	6.0	4.0	5.0	12.0	10.5	11.0	20.5	17.0	18.5
21	2.5	1.0	1.5	6.0	4.0	5.5	10.5	9.0	9.5	20.0	18.0	19.0
22	1.5	0.0	1.0	4.5	2.5	3.5	9.5	8.5	9.0	18.5	16.0	17.5
23	1.5	0.0	0.5	6.5	3.5	5.0	9.5	9.0	9.5	17.0	14.5	15.5
24	2.0	0.5	1.0	9.0	6.5	7.5	9.0	7.0	8.0	17.0	14.0	15.5
25	3.5	1.0	2.0	8.0	6.5	7.5	8.0	6.0	7.0	17.0	14.0	15.5
26	3.5	2.5	3.0	8.5	7.0	7.5	9.5	7.5	8.5	18.0	14.5	16.0
27	3.0	2.0	2.5	7.5	6.5	7.0	10.5	8.5	9.5	18.0	15.5	16.5
28	4.0	2.0	2.5	8.0	5.5	7.0	11.0	9.0	10.0	17.5	15.5	16.5
29	3.0	2.5	3.0	8.5	8.0	8.5	11.5	10.0	11.0	17.0	16.0	16.5
30	---	---	---	8.5	6.5	7.5	12.0	11.0	11.5	16.0	15.5	15.5
31	---	---	---	6.5	5.5	6.0	---	---	---	17.0	15.0	16.0
MONTH	4.5	0.0	1.0	9.0	0.0	3.5	15.5	5.0	9.5	20.5	7.0	14.5

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.5	16.5	17.5	21.0	17.0	19.0	21.5	19.0	20.5	20.0	18.0	19.0
2	19.5	16.0	18.0	20.5	17.5	19.0	22.0	19.0	20.0	18.5	16.5	17.5
3	19.5	16.5	18.0	21.5	17.5	19.5	21.5	18.0	20.0	20.5	16.5	18.5
4	20.0	16.5	18.0	22.0	18.0	20.0	20.0	18.0	19.0	19.0	16.5	18.0
5	20.5	17.0	19.0	23.0	19.0	21.0	20.0	18.5	19.0	18.0	15.0	16.5
6	21.0	17.5	19.5	23.0	19.5	21.5	20.0	17.5	18.5	18.5	15.0	16.5
7	22.0	18.5	20.0	23.5	21.0	22.0	20.5	17.0	18.5	20.5	16.5	18.5
8	22.5	19.0	20.5	23.5	20.0	22.0	20.5	17.0	18.5	20.5	17.0	19.0
9	23.0	19.5	21.0	25.0	21.0	23.0	21.0	17.5	19.0	18.5	16.5	18.0
10	23.0	20.0	21.5	26.0	23.0	24.5	22.5	19.0	20.5	16.5	13.5	15.0
11	24.0	20.5	22.5	27.0	24.0	25.0	22.5	20.5	21.5	16.0	12.5	14.5
12	24.5	21.5	23.0	24.5	21.5	23.0	23.5	20.5	21.5	16.5	13.0	15.0
13	24.0	21.0	22.0	23.5	19.5	21.5	23.0	20.0	21.5	17.5	14.5	16.0
14	23.0	20.5	22.0	24.5	21.0	23.0	21.5	19.0	20.0	18.0	16.5	17.0
15	22.5	20.0	21.5	23.0	21.0	22.0	20.0	17.0	18.5	16.5	14.0	15.0
16	20.0	17.5	18.5	21.0	19.0	20.0	18.5	15.5	17.0	15.0	12.5	14.0
17	19.5	16.0	18.0	20.5	17.5	19.0	19.0	16.5	17.5	15.5	12.5	14.0
18	18.5	17.0	18.5	22.0	17.5	19.5	22.0	17.0	19.5	15.5	13.0	14.0
19	18.5	15.5	17.0	20.5	19.5	20.0	23.5	20.0	21.5	14.5	13.5	14.0
20	20.0	15.5	18.0	21.5	20.0	20.5	23.5	20.0	22.0	15.0	13.5	14.0
21	21.0	17.0	19.5	22.0	20.0	21.0	22.5	19.0	21.0	14.0	12.5	13.5
22	21.5	18.5	20.0	21.5	18.5	20.0	23.0	19.5	21.0	13.0	10.5	11.5
23	20.5	18.5	19.5	24.0	20.5	22.0	22.5	20.5	21.5	12.5	10.5	11.5
24	18.5	17.0	18.0	24.0	20.5	22.5	22.5	19.0	20.5	11.5	9.0	10.5
25	19.5	16.0	18.0	24.0	20.5	22.0	21.5	19.5	20.5	11.0	9.0	10.0
26	21.0	18.5	20.0	22.0	21.0	21.5	21.5	19.0	20.0	12.0	9.5	10.5
27	23.0	19.5	21.0	23.5	20.0	21.5	23.0	19.5	21.0	11.5	11.0	11.0
28	24.0	20.5	22.0	23.0	21.5	22.5	21.0	18.5	19.5	11.5	9.5	10.5
29	21.0	17.5	19.5	23.0	20.5	21.5	19.0	16.0	17.5	12.0	9.5	10.5
30	20.0	16.5	18.5	24.0	21.0	22.0	19.5	15.5	17.5	12.5	10.0	11.0
31	---	---	---	22.5	21.0	21.5	20.0	16.5	18.5	---	---	---
MONTH	24.5	15.5	19.5	27.0	17.0	21.5	23.5	15.5	20.0	20.5	9.0	14.5

WISCONSIN RIVER BASIN

05408000 KICKAPOO RIVER AT LA FARGE, WI--CONTINUED

TURBIDITY (JTU), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5	4	25	4	3	---	30	8	15	---	8	6
2	3	4	10	3	4	10	20	6	8	5	8	10
3	3	4	2	4	5	4	---	4	7	5	8	10
4	5	4	15	3	4	7	15	5	9	6	9	20
5	4	5	10	4	3	8	15	5	---	4	10	10
6	3	6	8	4	4	8	15	4	10	4	6	10
7	4	7	5	5	3	6	15	6	7	5	5	10
8	3	3	6	4	6	9	8	4	8	2	6	8
9	3	5	5	5	5	5	5	5	8	2	20	9
10	3	40	4	4	3	5	7	5	8	3	7	9
11	3	20	4	5	6	15	8	4	9	3	6	10
12	---	10	5	5	20	50	5	3	8	5	7	8
13	4	5	35	6	25	50	6	4	20	3	6	---
14	3	7	35	3	20	30	6	3	15	15	15	9
15	3	4	50	---	25	15	4	5	15	10	---	10
16	3	5	20	3	---	25	---	15	15	7	9	20
17	4	5	---	2	35	9	10	20	15	5	9	15
18	4	5	8	3	30	20	35	8	15	---	9	15
19	3	7	5	5	30	55	60	8	10	7	9	15
20	5	7	5	4	10	55	15	4	15	15	6	15
21	4	9	7	3	---	45	90	5	10	9	7	7
22	5	7	6	4	4	15	65	5	10	7	9	5
23	---	6	6	3	7	10	25	4	10	5	6	6
24	6	---	6	4	15	15	20	4	10	9	7	6
25	8	4	6	4	10	10	55	5	15	6	7	4
26	7	4	15	4	30	150	20	5	15	5	8	7
27	5	7	10	3	50	150	15	4	7	6	6	7
28	3	5	5	3	40	40	10	6	5	9	4	6
29	3	8	7	3	30	35	7	5	7	10	4	5
30	3	55	5	3	---	100	7	7	8	7	---	6
31	5	---	4	3	---	65	---	7	---	15	8	---
MONTH	4	9	10	3	15	35	20	5	10	6	7	9

05408000 KICKAPOO RIVER AT LA FARGE, WI--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)					
	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)				
	OCTOBER				NOVEMBER				DECEMBER				JANUARY				FEBRUARY				MARCH			
1	14	4.6	18	5.5	94	56	74	26	4	1.2	38	23												
2	8	2.6	15	4.6	29	13	58	19	7	2.1	25	11												
3	6	2.0	19	5.8	25	11	44	14	8	2.4	26	11												
4	9	2.8	30	9.0	41	16	47	14	10	3.0	20	8.6												
5	10	3.2	24	7.2	33	15	79	23	4	1.2	11	4.5												
6	7	2.3	32	9.8	29	13	22	6.5	6	1.8	41	17												
7	11	3.5	48	15	18	6.6	10	3.0	5	1.5	33	13												
8	8	2.6	23	7.0	24	9.1	11	3.6	9	2.7	39	16												
9	8	2.5	33	11	30	11	9	2.9	6	1.9	31	12												
10	5	1.5	214	144	9	3.3	11	3.6	7	2.3	32	12												
11	7	2.1	91	43	10	3.7	14	4.5	20	11	83	40												
12	9	2.8	24	8.8	11	3.9	10	3.2	60	24	1070	3580												
13	11	3.7	15	5.4	107	38	11	3.6	159	137	730	2770												
14	12	3.9	18	6.0	108	50	12	3.9	74	50	307	322												
15	9	3.1	22	7.2	137	78	13	4.2	144	136	214	200												
16	5	1.6	20	6.6	56	22	14	4.5	156	375	107	77												
17	9	2.8	21	7.1	53	21	10	3.2	168	114	60	31												
18	14	4.5	21	6.9	50	20	8	2.6	103	63	106	77												
19	14	4.3	31	10	39	15	10	3.2	172	93	540	1050												
20	8	2.7	34	11	40	15	10	3.2	76	36	1300	4740												
21	9	2.7	41	18	28	11	12	3.9	37	16	537	852												
22	13	3.9	19	8.0	20	7.6	6	1.8	26	10	176	120												
23	19	5.8	12	4.3	30	11	6	1.8	41	16	99	59												
24	28	8.7	13	4.4	26	9.1	6	1.8	57	25	89	53												
25	37	13	14	4.6	24	8.4	8	2.4	59	28	80	46												
26	19	6.2	20	7.7	62	22	4	1.2	155	96	1570	3370												
27	8	2.3	39	22	99	35	11	3.3	614	983	1190	1520												
28	10	3.0	20	11	57	20	10	3.2	1080	2540	291	221												
29	9	2.8	42	23	31	11	9	2.9	180	191	310	256												
30	6	1.8	434	522	36	13	8	2.6	---	---	1130	2220												
31	14	4.1	---	---	40	14	8	2.4	---	---	839	1560												
MONTH	---	113.4	---	955.9	---	586.7	---	179.0	---	4964.1	---	23292.1												

DAY	MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)					
	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)	CONCENTRATION (MG/L)	LOADS (T/DAY)				
	APRIL				MAY				JUNE				JULY				AUGUST				SEPTEMBER			
1	233	263	47	30	48	21	41	12	27	8.0	42	11												
2	140	117	35	21	37	14	32	9.0	29	7.8	60	15												
3	110	81	23	13	46	16	33	9.1	37	9.6	32	7.8												
4	91	61	20	11	38	13	42	11	40	10	50	12												
5	71	43	26	14	35	12	41	11	37	10	44	9.3												
6	64	36	23	12	35	11	32	8.6	22	6.5	40	9.5												
7	60	32	15	7.2	36	11	47	13	25	6.8	23	5.3												
8	46	23	15	7.0	37	11	31	9.2	27	7.0	26	5.9												
9	41	20	17	7.7	42	13	25	6.8	20	5.1	32	7.3												
10	43	21	18	8.0	46	14	26	7.0	24	6.2	36	8.2												
11	43	22	13	5.7	44	13	29	7.7	40	11	46	11												
12	29	14	13	5.2	37	11	25	6.6	26	6.6	44	10												
13	26	12	19	8.2	53	17	21	5.4	26	6.7	54	13												
14	31	14	18	8.1	57	21	28	7.6	57	17	39	9.1												
15	105	58	18	7.7	59	20	84	25	44	12	32	7.6												
16	127	75	81	69	88	28	73	24	31	7.7	86	21												
17	57	31	74	57	72	23	47	15	30	7.4	62	15												
18	253	297	28	15	66	21	46	14	32	7.9	53	13												
19	433	595	41	19	61	19	49	15	36	8.9	68	17												
20	127	99	18	8.1	65	20	145	50	24	5.9	66	20												
21	499	881	14	6.0	45	13	63	24	28	6.8	26	6.9												
22	468	884	17	7.2	51	15	55	19	36	8.7	18	4.7												
23	162	169	17	7.1	43	12	23	7.5	20	4.7	22	5.6												
24	146	165	21	8.4	46	13	19	5.6	28	6.4	24	6.0												
25	323	578	17	6.4	57	18	22	6.5	34	8.0	10	2.4												
26	130	147	22	8.1	63	19	18	4.9	32	9.0	22	5.4												
27	77	65	19	7.2	38	11	26	7.7	28	7.1	22	5.7												
28	64	46	17	6.4	38	10	32	9.5	54	13	25	6.5												
29	55	37	19	6.9	45	15	30	9.7	20	4.4	15	5.8												
30	50	32	33	13	57	21	26	7.7	62	15	22	5.6												
31	---	---	37	16	---	---	35	11	23	5.7	---	---												
MONTH	---	4918.0	---	426.6	---	476.0	---	380.1	---	256.9	---	282.6												

TOTAL LOAD FOR YEAR: 36831.4 TONS.

WISCONSIN RIVER BASIN

05409830 NORTH FORK NEDERLO CREEK NEAR GAYS MILLS, WI

LOCATION.--LAT 43°21'47", LONG 90°54'34", IN NE 1/4 SEC.12, T.10 N., R.5 W., CRAWFORD COUNTY, HYDROLOGIC UNIT 07070006, ON RIGHT BANK 160 FT (50 M) UPSTREAM FROM TOWN-ROAD BRIDGE, 0.3 MI (0.5 KM) UPSTREAM FROM SOUTH FORK NEDERLO CREEK, AND 4.5 MI (7.2 KM) NORTHWEST OF GAYS MILLS.

DRAINAGE AREA.--2.28 MI² (5.91 KM²).

PERIOD OF RECORD.--OCTOBER 1967 TO CURRENT YEAR.

REVISED RECORD.--WRD WIS. 1970: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. CONCRETE CONTROL SINCE OCT. 8, 1968. ALTITUDE OF GAGE IS 800 FT (240 M) FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS FAIR.

AVERAGE DISCHARGE.--9 YEARS, 0.89 FT³/S (0.0252 M³/S), 5.25 IN/YR (133 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 541 FT³/S (15.3 M³/S) JUNE 23, 1968, GAGE HEIGHT, 14.60 FT (4.450 M) FROM RATING CURVE EXTENDED ABOVE 3 FT³/S (0.085 M³/S) ON BASIS OF CONTRACTED-OPENING MEASUREMENT MADE AT 14.60 FT (4.450 M), COMPUTATION OF FLOW THROUGH CULVERT MADE AT GAGE HEIGHT 13.80 FT (4.206 M) AND SLOPE-AREA MEASUREMENT MADE AT GAGE HEIGHT 13.10 FT (3.993 M); MINIMUM, 0.34 FT³/S (0.010 M³/S) FEB. 22, 1971, GAGE HEIGHT, 10.65 FT (3.246 M) RESULT OF FREEZEUP.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 38 FT³/S (1.08 M³/S) MAR. 12, GAGE HEIGHT, 12.42 FT (3.786 M); MINIMUM, 0.77 FT³/S (0.022 M³/S) AUG. 28, GAGE HEIGHT, 10.79 FT (3.289 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).

10.8	0.8	11.4	4.6
11.0	1.6	11.7	9.0
11.2	2.8	12.0	18

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.99	.99	1.1	.99	.98	1.1	1.2	1.1	.97	.93	.89	.83
2	.98	.99	1.1	.97	.95	1.0	1.1	1.1	.97	.93	.86	.83
3	.99	.99	1.1	.94	.97	1.0	1.1	1.1	.97	.92	.86	.83
4	.99	.99	1.1	.95	.95	1.0	1.1	1.0	.97	.87	.88	.82
5	.99	.99	1.1	.95	.95	1.0	1.1	1.1	.93	.88	.92	.82
6	.99	.99	1.0	.96	.95	.99	.99	1.0	.94	.89	.89	.83
7	.99	1.0	1.0	.95	.97	1.0	.97	1.0	.94	.93	.87	.82
8	.99	.99	1.0	.95	.99	1.0	.95	1.0	.94	.90	.87	.82
9	.99	1.1	1.0	.94	1.0	1.0	.95	1.0	.91	.87	.86	.83
10	.99	1.1	1.0	.95	1.4	1.2	1.3	1.0	.93	.86	.88	.83
11	.99	1.0	1.0	.95	1.2	3.1	1.1	1.0	.93	.86	.87	.83
12	.99	1.0	1.0	.95	3.3	22	1.0	1.0	.91	.87	.87	.83
13	.99	.99	1.1	.95	1.2	1.3	.99	1.1	.96	.86	.87	.82
14	.99	.99	1.2	.95	.99	1.2	1.0	1.0	.93	.86	.89	.84
15	.99	1.0	1.1	.98	4.9	1.1	1.1	1.1	.93	.88	.83	.84
16	.99	.99	1.0	.95	1.1	1.1	1.0	1.5	.92	.88	.83	.84
17	.99	.99	.99	.95	1.1	1.1	1.3	1.2	.91	.84	.84	.84
18	.99	.99	1.0	.95	1.1	3.1	1.9	1.1	.94	.83	.83	.84
19	.99	1.0	.98	.97	1.1	2.8	1.2	1.1	.93	.89	.82	.91
20	.99	1.1	.96	.97	1.1	1.4	2.1	1.0	.90	.91	.82	.87
21	.99	1.0	.99	.96	1.1	1.2	1.9	1.0	.90	.88	.82	.86
22	1.0	.99	.98	.97	1.0	1.1	1.3	1.0	.91	.87	.82	.84
23	1.0	1.0	.99	.99	1.0	1.1	1.3	1.0	.93	.87	.82	.84
24	1.0	1.0	.99	.99	1.1	1.1	1.7	1.0	.98	.86	.83	.84
25	.99	1.0	.99	.98	1.2	1.1	1.5	.99	.94	.86	.84	.84
26	.99	1.0	.99	.97	2.8	1.1	1.2	.98	.93	.89	.86	.85
27	.99	1.0	.96	.95	11	1.1	1.2	.98	.94	.89	.84	.85
28	.99	1.0	.96	.99	2.9	1.1	1.1	.99	.94	.97	.82	.84
29	.99	2.2	.99	.99	1.3	1.3	1.1	1.0	1.0	.87	.82	.84
30	.99	1.3	.99	.99	---	1.7	1.1	1.0	.94	1.2	.83	.84
31	.99	---	.99	.99	---	1.2	---	1.0	---	.95	.83	---
TOTAL	30.71	31.67	31.65	29.89	50.60	61.59	36.85	32.44	28.14	27.77	26.38	25.16
MEAN	.99	1.06	1.02	.96	1.74	1.99	1.23	1.05	.94	.90	.85	.84
MAX	1.0	2.2	1.2	.99	11	22	2.1	1.5	1.0	1.2	.92	.91
MIN	.98	.99	.96	.94	.95	.99	.95	.98	.90	.83	.82	.82
CFSM	.43	.46	.45	.42	.76	.87	.54	.46	.41	.39	.37	.37
IN.	.50	.52	.52	.49	.83	1.00	.60	.53	.46	.45	.43	.41
CAL YR 1975	TOTAL	395.81	MEAN	1.08	MAX	10	MIN	.88	CFSM	.47	IN	6.46
WTR YR 1976	TOTAL	412.85	MEAN	1.13	MAX	22	MIN	.82	CFSM	.50	IN	6.73

05409830 NORTH FORK NEDERLO CREEK NEAR GAYS MILLS, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--NOVEMBER 1967 TO CURRENT YEAR.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS DRY WEIGHT G/SQ M	UNCORRECTED PERI-PHYTON CHLOROPHYLL A MG/SQ M	UNCORRECTED PERI-PHYTON CHLOROPHYLL A MG/SQ M	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV , 1975												
04...	1010	.99	520	10.5	12.2	115	12.0	14.0	.90	21	24	.06
DEC												
16...	1030	1.0	510	5.0	12.8	105	77.0	88.0	.00	140	20	.05
JAN , 1976												
27...	1030	.95	480	1.5	14.6	109	26.0	28.0	.00	23	2	.01
MAR												
02...	1150	1.0	500	4.0	12.2	98	.900	1.80	.00	2.7	1	.00
APR												
06...	0950	.99	500	9.5	12.5	115	--	--	--	--	6	.02
MAY												
04...	0850	1.0	510	6.5	12.4	105	41.2	46.0	4.9	44	18	.05
JUN												
17...	0825	.91	500	12.0	--	--	2.31	3.00	.00	5.8	2	.00
JUL												
20...	1230	.91	500	15.0	9.6	99	6.15	9.69	.00	9.4	2	.00
AUG												
24...	0850	.84	520	12.0	--	--	6.23	14.2	1.2	9.8	15	.03
SEP												
28...	0910	.84	520	8.5	--	--	4.00	6.08	2.5	11	8	.02

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Nov. 4, 1975	1010	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	48	36	
		<i>Cocconeis</i>		0	
		<i>Gomphonema</i>	12	9	
		<i>Gyrosigma</i>		0	
		<i>Hantzschia</i>		0	
		<i>Navicula</i>	36	27	
		<i>Nitzschia</i>	36	27	
		<i>Stauroneis</i>		0	
		<i>Surirella</i>		0	
		TOTAL	130		
Dec. 16, 1975	1030	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	59	17	
		<i>Amphora</i>		0	
		<i>Cocconeis</i>	5	2	
		<i>Fragilaria</i>	5	2	
		<i>Gomphonema</i>	22	6	
		<i>Navicula</i>	11	3	
		<i>Synedra</i>	11	3	
		CYANOPHYTA			
		Myxophyceae			
		<i>Oscillatoria</i>	230	67	
		TOTAL	340		
Jan. 27, 1976	1030	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	30	27	
		<i>Cyclotella</i>		0	
		<i>Gomphonema</i>	38	33	
		<i>Meridion</i>		0	
		<i>Navicula</i>	30	27	
		<i>Nitzschia</i>	8	7	
		<i>Synedra</i>	8	7	
		TOTAL	110		
Mar. 2, 1976	1150	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	88	43	
		<i>Caloneis</i>	15	7	
		<i>Gomphonema</i>	29	14	
		<i>Hantzschia</i>		0	
		<i>Navicula</i>	29	14	
		<i>Nitzschia</i>	29	14	
		<i>Surirella</i>		0	
		<i>Synedra</i>		0	
		Chrysophyceae			
		<i>Ochromonas</i>	15	7	
		CYANOPHYTA			
		Myxophyceae			
		<i>Oscillatoria</i>		0	
		TOTAL	210		

WISCONSIN RIVER BASIN

05409830 NORTH FORK NEDERLO CREEK NEAR GAYS MILLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method	
Apr. 6, 1976	0950	CHRYSOPHYTA			Grab sample	
		Bacillariophyceae				
		<i>Achnanthes</i>	140	36		
		<i>Cocconeis</i>		0		
		<i>Cymbella</i>		0		
		<i>Gomphonema</i>	140	36		
		<i>Meridion</i>		0		
		<i>Navicula</i>	48	12		
		<i>Nitzschia</i>	16	4		
		<i>Surirella</i>	48	12		
		<i>Synedra</i>		0		
		CYANOPHYTA				
		Myxophyceae				
		<i>Oscillatoria</i>		0		
		EUGLENOPHYTA				
		Euglenophyceae				
		<i>Euglena</i>		0		
TOTAL	400					
May 4, 1976	0850	CHRYSOPHYTA			Grab sample	
		Bacillariophyceae				
		<i>Achnanthes</i>	83	15		
		<i>Cymbella</i>		0		
		<i>Diatoma</i>		0		
		<i>Gomphonema</i>	21	4		
		<i>Hantzschia</i>		0		
		<i>Meridion</i>	62	12		
		<i>Navicula</i>	41	8		
		<i>Nitzschia</i>	310	58		
		<i>Surirella</i>		0		
		<i>Synedra</i>	21	4		
		CYANOPHYTA				
		Myxophyceae				
		<i>Oscillatoria</i>		0		
		<i>Plectonema</i>		0		
		TOTAL	540			
June 17, 1976	0825	CHLOROPHYTA			Grab sample	
		Chlorophyceae				
		<i>Chlamydomonas</i>	16	2		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Achnanthes</i>	190	27		
		<i>Cyclotella</i>	32	4		
		<i>Navicula</i>	65	9		
		<i>Nitzschia</i>	48	7		
		CYANOPHYTA				
Myxophyceae						
<i>Oscillatoria</i>	370	51				
TOTAL	730					
July 20, 1976	1230	CHRYSOPHYTA			Grab sample	
		Bacillariophyceae				
		<i>Achnanthes</i>	450	51		
		<i>Cocconeis</i>	48	5		
		<i>Navicula</i>	72	8		
		<i>Nitzschia</i>	140	16		
		<i>Synedra</i>	24	3		
		CYANOPHYTA				
		Myxophyceae				
		<i>Oscillatoria</i>	140	16		
TOTAL	880					
Aug. 24, 1976	0850	CHRYSOPHYTA			Grab sample	
		Bacillariophyceae				
		<i>Achnanthes</i>	62	20		
		<i>Cocconeis</i>	6	2		
		<i>Cymbella</i>	6	2		
		<i>Gomphonema</i>	12	4		
		<i>Melosira</i>	6	2		
		<i>Navicula</i>	19	6		
		<i>Nitzschia</i>	37	12		
		<i>Synedra</i>	12	4		
		CYANOPHYTA				
		Myxophyceae				
		<i>Agmenellum</i>	130	41		
		<i>Oscillatoria</i>	25	8		
		TOTAL	320			

05409830 NORTH FORK NEDERLO CREEK NEAR GAYS MILLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Sept. 28, 1976	0910	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Cocconeis</i>	5	3	
		<i>Cymbella</i>		0	
		<i>Gomphonema</i>	15	9	
		<i>Navicula</i>	30	17	
		<i>Rhoicosphenia</i>	10	6	
		CYANOPHYTA			
		Myxophyceae			
		<i>Lyngbya</i>	40	23	
		<i>Oscillatoria</i>	46	26	
		EUGLENOPHYTA			
		Cryptophyceae			
		<i>Chroomonas</i>		0	
<i>Cryptomonas</i>	5	3			
PYRRHOPHYTA					
Dinophyceae					
<i>Glenodinium</i>	25	14			
TOTAL		180			

PERIPHYTON

Date	Length of exposure (days)	Organism	Sampling method			
Nov. 4, 1975	39	CHLOROPHYTA	Polyethylene strip			
		Chlorophyceae				
		<i>Stigeoclonium</i> P				
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Achnanthes</i> E				
		<i>Cocconeis</i> P				
		<i>Gomphonema</i> E				
		<i>Navicula</i> P				
		<i>Nitzschia</i> P				
		<i>Synedra</i> P				
		CYANOPHYTA				
		Myxophyceae				
		<i>Lyngbya</i> P				
		<i>Oscillatoria</i> P				
		Dec. 16, 1975		41	CHLOROPHYTA	Polyethylene strip
					Chlorophyceae	
					<i>Stigeoclonium</i> P	
					<i>Ulothrix</i> P	
CHRYSOPHYTA						
Bacillariophyceae						
<i>Achnanthes</i> E						
<i>Cocconeis</i> P						
<i>Cymbella</i> P						
<i>Fragilaria</i> P						
<i>Gomphonema</i> E						
<i>Navicula</i> P						
<i>Nitzschia</i> P						
<i>Surirella</i> P						
<i>Synedra</i> P						
CYANOPHYTA						
Myxophyceae						
<i>Agmenellum</i> P						
<i>Oscillatoria</i> P						
Jan. 27, 1976	42		CHLOROPHYTA		Polyethylene strip	
		Chlorophyceae				
		<i>Oedogonium</i> P				
		<i>Stigeoclonium</i> P				
		<i>Ulothrix</i> P				
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Achnanthes</i> E				
		<i>Cocconeis</i> P				
		<i>Cymbella</i> P				
		<i>Gomphonema</i> E				
		<i>Navicula</i> P				
		<i>Nitzschia</i> P				
		<i>Stauroneis</i> P				
		<i>Synedra</i> P				
		CYANOPHYTA				
		Myxophyceae				
		<i>Oscillatoria</i> P				

P Present
E Estimated dominant

WISCONSIN RIVER BASIN

05409830 NORTH FORK NEDERLO CREEK NEAR GAYS MILLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PERIPHYTON

Date	Length of exposure (days)	Organism	Sampling method
Aug. 24, 1976	35	CHLOROPHYTA	Polyethylene strip
		Chlorophyceae	
		<i>Characium</i> P	
		<i>Oedogonium</i> P	
		<i>Stigeoclonium</i> P	
		CHRYSOPHYTA	
		Bacillariophyceae	
		<i>Achnanthes</i> P	
		<i>Cocconeis</i> E	
		<i>Cymbella</i> P	
		<i>Gomphonema</i> E	
		<i>Navicula</i> P	
		<i>Nitzschia</i> P	
		<i>Rhoicosphenia</i> P	
		<i>Synedra</i> P	
		CYANOPHYTA	
		Myxophyceae	
<i>Chamaesiphon</i> E			
<i>Lyngbya</i> P			
<i>Oscillatoria</i> P			
Sept. 28, 1976	35	CHLOROPHYTA	Polyethylene strip
		Chlorophyceae	
		<i>Oedogonium</i> P	
		<i>Stigeoclonium</i> E	
		CHRYSOPHYTA	
		Bacillariophyceae	
		<i>Achnanthes</i> E	
		<i>Cocconeis</i> E	
		<i>Cymbella</i> P	
		<i>Gomphonema</i> P	
		<i>Navicula</i> P	
		<i>Nitzschia</i> P	
		<i>Surirella</i> P	
		<i>Synedra</i> P	
		CYANOPHYTA	
		Myxophyceae	
		<i>Lyngbya</i> P	

P Present
E Estimated dominant

05409830 NORTH FORK NEDERLO CREEK NEAR GAYS MILLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PERIPHYTON

Date	Length of exposure (days)	Organism	Sampling method
Mar. 2, 1976	35	CHLOROPHYTA	Polyethylene strip
		Chlorophyceae	
		<i>Stigeoclonium</i> E	
		<i>Ulothrix</i> P	
		CHRYSOPHYTA	
		Bacillariophyceae	
		<i>Achnanthes</i> P	
		<i>Gomphonema</i> P	
		<i>Meridion</i> P	
		<i>Navicula</i> P	
		<i>Nitzschia</i> P	
		<i>Synedra</i> P	
		CYANOPHYTA	
		Myxophyceae	
<i>Oscillatoria</i> P			
May 4, 1976	30	CHLOROPHYTA	Polyethylene strip
		Chlorophyceae	
		<i>Ulothrix</i> E	
		CHRYSOPHYTA	
		Bacillariophyceae	
		<i>Achnanthes</i> E	
		<i>Cocconeis</i> P	
		<i>Cymatopleura</i> P	
		<i>Cymbella</i> P	
		<i>Gomphonema</i> E	
		<i>Meridion</i> P	
		<i>Navicula</i> P	
		<i>Nitzschia</i> P	
		<i>Surirella</i> P	
		<i>Synedra</i> P	
		CYANOPHYTA	
		Myxophyceae	
		<i>Lyngbya</i> P	
		<i>Oscillatoria</i> P	
		June 17, 1976		44	CHLOROPHYTA	Polyethylene strip
Chlorophyceae			
<i>Stigeoclonium</i> E			
CHRYSOPHYTA			
Bacillariophyceae			
<i>Cocconeis</i> E			
<i>Cymbella</i> P			
<i>Navicula</i> P			
<i>Nitzschia</i> P			
<i>Synedra</i> P			
CYANOPHYTA			
Myxophyceae			
<i>Lyngbya</i> P			
July 20, 1976	33	CHLOROPHYTA	Polyethylene strip
		Chlorophyceae	
		<i>Oedogonium</i> P	
		<i>Stigeoclonium</i> E	
		CHRYSOPHYTA	
		Bacillariophyceae	
		<i>Achnanthes</i> P	
		<i>Cocconeis</i> E	
		<i>Cyclotella</i> P	
		<i>Cymbella</i> P	
		<i>Gomphonema</i> P	
		<i>Melosira</i> P	
		<i>Navicula</i> P	
		<i>Nitzschia</i> P	
		<i>Rhicosphenia</i> P	
		<i>Synedra</i> P	
		CYANOPHYTA	
		Myxophyceae	
		<i>Agmenellum</i> P	
<i>Chamaesiphon</i> P			
<i>Lyngbya</i> E			
<i>Oscillatoria</i> P			

P Present
E Estimated dominant

WISCONSIN RIVER BASIN

05409842 NORTH FORK NEDERLO CREEK AT MOUTH NEAR GAYS MILLS, WI

LOCATION.--LAT 43°21'36", LONG 90°54'30", IN SW 1/4 NE 1/4 SEC.12, T.10 N., R.5 W., CRAWFORD COUNTY, HYDROLOGIC UNIT 07070006, AT GAGING STATION JUST UPSTREAM OF CONFLUENCE WITH SOUTH FORK NEDERLO CREEK, 4.3 MI (6.9 KM) NORTHWEST OF GAYS MILLS.

DRAINAGE AREA.--2.4 MI² (6.2 KM²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--MAY 1974 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: MAY 1974 TO CURRENT YEAR.

INSTRUMENTATION.--TEMPERATURE RECORDER SINCE MAY 1, 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: MAXIMUM, 20.5°C JULY 18, 1974; MINIMUM, 0.0°C ON MANY DAYS DURING WINTER PERIOD.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: MAXIMUM RECORDED, 19.0°C JUNE 13; MINIMUM, 0.5°C FEB. 27, 28, MAR. 12.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.0	8.0	9.5	11.0	8.0	9.0	5.0	3.5	4.5	6.0	5.0	5.5
2	11.5	7.0	9.0	9.5	7.0	8.0	6.5	4.5	5.5	5.5	4.0	5.5
3	12.5	7.5	9.5	10.5	9.5	9.5	5.5	5.0	5.0	4.5	2.0	3.0
4	12.5	8.0	10.0	11.5	8.5	9.5	7.0	4.5	6.0	4.0	1.0	2.5
5	12.5	8.0	9.5	10.0	8.5	9.0	9.5	5.5	7.5	5.5	1.5	4.0
6	12.5	7.5	9.5	10.5	9.5	10.0	6.0	4.5	5.0	6.0	4.0	5.0
7	12.5	7.5	10.0	10.5	9.0	10.0	6.5	4.5	5.5	4.0	1.0	2.0
8	12.5	8.5	10.5	10.0	8.0	9.0	6.5	5.0	6.0	3.5	1.0	2.0
9	12.5	9.0	10.5	9.5	9.0	9.0	6.5	5.0	5.5	5.0	1.0	2.5
10	11.5	8.0	9.0	9.5	7.0	8.5	7.0	5.0	6.5	5.0	1.5	4.0
11	12.0	7.0	9.0	8.5	6.5	7.5	6.0	5.0	5.5	5.5	4.5	5.0
12	12.5	8.0	10.0	8.0	6.5	7.5	6.0	4.5	5.5	6.5	4.0	5.0
13	13.5	9.5	11.0	8.0	5.5	6.5	7.5	5.5	7.0	6.0	4.0	5.0
14	13.0	10.0	11.0	8.0	5.5	6.5	8.5	4.5	7.5	5.5	3.0	4.0
15	10.0	8.0	9.0	9.0	6.0	7.5	7.0	4.0	4.5	5.5	3.5	4.5
16	10.5	7.0	8.5	9.5	6.5	7.5	6.5	3.0	5.0	5.5	1.0	3.5
17	11.0	7.0	8.5	10.0	7.0	8.5	3.5	2.5	3.0	4.0	1.0	2.0
18	10.0	6.5	8.0	10.0	7.5	8.5	4.5	1.0	3.0	5.0	1.0	3.0
19	10.0	6.5	8.0	10.5	8.5	9.0	6.0	4.5	5.5	6.5	4.5	5.5
20	11.0	7.0	8.5	9.0	8.0	8.5	6.0	5.0	5.5	5.5	1.5	4.0
21	11.0	7.0	9.0	7.5	5.5	6.5	6.0	4.0	5.0	6.0	4.0	5.0
22	11.5	7.5	9.5	7.5	5.5	6.0	6.0	4.0	5.0	6.0	3.5	4.5
23	12.0	9.5	11.0	7.0	5.0	6.0	6.5	5.5	6.0	6.0	4.0	5.0
24	12.0	8.5	10.5	6.5	5.0	6.0	6.0	5.0	5.5	7.0	5.0	5.5
25	10.0	7.0	8.5	6.5	4.5	5.5	6.0	5.5	6.0	6.0	4.0	5.0
26	9.5	6.5	8.0	6.0	4.0	5.0	6.0	5.0	5.5	5.0	1.0	4.0
27	11.5	7.0	9.0	7.0	4.5	5.5	5.5	5.0	5.5	5.0	1.0	2.0
28	10.5	7.5	9.5	5.5	5.0	5.5	6.0	5.0	5.5	7.0	1.5	5.0
29	9.5	6.0	7.5	7.0	5.0	6.5	6.5	5.0	6.0	6.0	3.0	5.0
30	9.0	6.0	7.5	7.5	4.0	5.5	6.5	6.0	6.0	6.0	4.0	5.0
31	10.5	7.5	9.0	---	---	---	6.0	5.0	6.0	6.5	1.5	4.5
MONTH	13.5	6.0	9.5	11.5	4.0	7.5	9.5	1.0	5.5	7.0	1.0	4.0

05409842 NORTH FORK NEDERLO CREEK AT MOUTH NEAR GAYS MILLS, WI--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.0	1.0	4.0	5.0	4.0	4.5	10.5	6.5	8.0	13.0	7.5	9.5
2	4.5	1.0	2.0	5.5	4.5	5.0	13.0	5.5	9.0	12.5	8.0	9.0
3	5.0	1.0	3.5	7.5	5.0	6.0	12.0	6.5	9.0	11.0	7.5	8.5
4	5.0	2.0	3.5	5.5	2.5	4.5	13.0	6.0	8.5	14.0	6.0	10.0
5	5.5	1.5	4.0	7.5	3.0	5.5	13.0	6.0	9.0	13.0	8.5	10.5
6	6.0	1.0	3.5	8.0	2.5	5.0	13.5	6.5	9.5	13.5	7.5	10.0
7	6.5	1.0	4.0	8.5	4.0	6.0	13.0	6.5	9.0	14.0	7.0	10.0
8	8.0	5.0	6.0	8.0	4.0	6.0	13.0	6.0	9.0	15.0	7.0	10.5
9	7.5	4.0	6.0	8.5	6.0	7.0	13.5	6.0	9.0	16.0	8.5	11.5
10	8.0	3.5	6.0	8.5	4.5	6.5	11.5	7.5	9.5	16.0	8.5	11.5
11	7.5	4.0	5.0	8.5	1.5	5.0	12.5	6.0	9.0	15.5	8.5	11.0
12	8.0	1.5	4.5	3.0	0.5	1.0	13.0	6.0	9.0	15.5	7.5	11.0
13	7.0	4.0	5.5	8.5	3.0	5.5	13.5	6.5	9.5	11.0	9.5	10.0
14	7.5	3.5	6.0	8.0	5.0	6.0	12.5	8.0	10.0	16.0	9.0	12.0
15	6.5	1.0	4.5	8.5	4.0	6.0	13.5	9.5	11.0	11.5	9.0	10.0
16	6.5	4.5	5.5	8.0	4.0	5.5	13.5	9.5	11.5	11.5	9.5	10.5
17	6.5	6.0	6.0	9.0	3.5	6.0	14.5	10.5	12.0	15.0	9.0	11.5
18	7.0	4.5	6.0	8.5	2.5	5.5	13.5	9.0	11.5	15.5	8.0	11.0
19	8.0	5.0	6.5	9.0	5.0	7.0	13.0	7.5	10.0	16.5	8.5	12.0
20	7.0	4.5	6.0	12.5	6.5	9.0	11.0	7.5	9.0	17.0	11.0	13.0
21	6.0	2.5	4.5	9.5	4.5	6.5	9.5	8.5	9.0	16.5	9.5	12.5
22	7.5	3.0	5.0	10.5	4.0	7.0	13.5	7.5	10.0	12.5	10.0	11.0
23	8.0	2.5	5.0	12.0	5.5	8.0	10.5	7.5	9.0	15.0	9.0	11.5
24	9.0	4.0	6.0	12.0	7.0	8.5	9.0	7.0	8.5	16.0	8.5	11.5
25	9.0	4.0	6.0	11.5	6.0	8.5	13.0	6.5	9.0	16.0	8.5	12.0
26	9.0	1.5	4.5	10.0	8.0	9.0	13.5	6.0	9.0	16.5	9.0	12.0
27	7.5	0.5	3.0	10.5	6.5	8.0	13.5	6.5	9.5	15.5	9.5	12.0
28	7.0	0.5	3.5	12.5	5.5	8.5	14.0	6.5	10.0	13.5	9.5	11.5
29	6.5	3.5	5.0	9.0	8.5	8.5	13.5	7.0	10.0	14.0	11.0	12.0
30	---	---	---	8.5	7.0	8.0	14.0	8.5	10.5	14.0	11.0	12.0
31	---	---	---	8.5	6.5	7.5	---	---	---	16.0	10.5	12.5
MONTH	9.0	0.5	5.0	12.5	0.5	6.5	14.5	5.5	9.5	17.0	6.0	11.0
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.5	11.0	12.5	17.0	10.5	13.0	---	---	---	13.5	11.0	12.0
2	17.0	10.0	12.5	16.5	10.5	13.0	15.5	11.5	13.5	14.0	10.5	12.0
3	17.0	9.5	12.5	17.0	10.5	13.5	15.5	10.5	12.5	15.5	11.0	12.5
4	17.0	9.5	13.0	16.5	11.0	13.5	14.0	10.5	12.0	14.0	9.5	11.5
5	17.5	10.0	13.0	17.0	11.0	13.5	14.0	11.5	12.5	14.0	9.5	11.5
6	17.5	10.0	13.5	17.5	11.5	14.0	15.0	10.5	12.5	14.0	10.0	12.0
7	18.0	11.0	13.5	17.0	12.5	14.0	15.0	10.0	12.0	15.0	10.5	12.5
8	18.0	11.0	14.0	17.0	11.5	14.0	15.5	9.5	12.0	14.5	10.0	12.0
9	17.5	11.5	14.0	18.5	12.0	14.5	15.5	10.0	12.5	13.0	10.0	11.5
10	17.0	11.5	14.0	18.5	12.5	15.0	15.5	11.5	13.0	13.5	9.0	11.0
11	18.5	11.5	14.5	18.5	13.0	15.0	15.5	11.5	13.0	14.0	9.0	11.5
12	18.0	12.0	14.5	17.0	11.5	13.5	15.5	11.0	13.0	14.0	9.5	11.5
13	19.0	11.5	14.5	17.5	11.5	14.0	15.5	11.0	13.0	13.5	10.5	12.0
14	17.0	12.0	14.0	17.5	12.5	14.5	13.0	11.0	12.0	13.5	11.0	12.5
15	16.5	12.5	14.0	17.0	12.0	14.0	14.5	10.0	12.0	12.0	11.0	11.0
16	16.0	11.5	13.0	16.0	11.5	13.5	13.5	9.0	11.5	13.0	9.0	11.0
17	17.5	11.0	13.5	16.5	10.5	13.0	13.5	11.0	12.0	13.0	9.5	11.0
18	14.5	11.0	13.0	17.0	11.0	13.5	16.0	11.0	13.0	13.5	9.5	11.0
19	16.5	10.0	13.0	15.0	12.0	13.0	15.5	11.5	13.0	12.0	10.0	11.0
20	17.5	10.5	13.5	13.5	13.0	13.0	15.5	11.0	12.5	13.0	10.5	11.5
21	17.5	10.5	13.5	---	---	---	15.5	10.5	12.5	12.5	9.5	10.5
22	17.0	11.0	13.5	---	---	---	15.5	11.0	12.5	12.5	8.5	10.5
23	15.5	11.5	13.5	---	---	---	14.5	11.5	12.5	12.5	8.5	10.0
24	13.0	11.5	12.5	---	---	---	15.0	10.5	12.5	12.5	8.0	10.0
25	17.5	10.5	13.5	---	---	---	14.0	11.0	12.5	12.0	8.5	10.0
26	16.0	11.5	13.5	---	---	---	14.5	11.5	12.5	13.0	9.0	10.5
27	17.5	12.0	14.0	---	---	---	15.5	11.0	13.0	11.0	9.5	10.0
28	18.0	12.0	14.0	---	---	---	14.5	10.0	12.0	12.5	8.0	10.0
29	14.0	11.5	12.5	---	---	---	14.0	9.5	11.5	13.5	8.5	10.5
30	17.0	11.5	13.5	---	---	---	15.0	10.0	12.0	13.0	8.5	10.5
31	---	---	---	---	---	---	15.0	11.0	12.5	---	---	---
MONTH	19.0	9.5	13.5	---	---	---	16.0	9.0	12.5	15.5	8.0	11.0

WISCONSIN RIVER BASIN

05409860 SOUTH FORK NEDERLO CREEK NEAR GAYS MILLS, WI

LOCATION.--LAT 43°21'36", LONG 90°54'31", IN SW 1/4 NE 1/4 SEC.12, T.10 N., R.5 W., CRAWFORD COUNTY, HYDROLOGIC UNIT 07070006, AT GAGING STATION ON LEFT BANK IN PASTURE 200 FT (61 M) UPSTREAM FROM CONFLUENCE WITH NORTH FORK NEDERLO CREEK AND 4.3 MI (6.9 KM) NORTHWEST OF GAYS MILLS.

DRAINAGE AREA.--4.09 MI² (10.6 KM²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1974 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: OCTOBER 1974 TO CURRENT YEAR.

INSTRUMENTATION.--TEMPERATURE RECORDER SINCE MAY 1, 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: MAXIMUM, 26.5°C JUNE 4, 1974; MINIMUM, 0.0°C ON MANY DAYS DURING WINTER PERIOD.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: MAXIMUM, 25.5°C JUNE 13, MINIMUM, 0.0°C ON MANY DAYS DURING WINTER PERIOD.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS OIS- CHARGF (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	PERI- PHYTON BIOMASS ASH WEIGHT B/SQ M	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
NOV , 1975												
04...	1045	1.2	520	10.0	12.5	116	6.80	8.20	2.7	17	14	.05
DEC												
16...	1110	1.2	510	3.0	13.5	105	11.0	15.0	.30	59	12	.04
JAN , 1976												
27...	1130	1.1	--	.0	14.0	101	1.50	2.00	.50	7.2	12	.04
MAR												
02...	1220	1.4	500	3.0	12.0	93	--	--	--	--	1	.00
APR												
06...	1020	1.3	510	7.5	12.9	113	25.0	28.0	1.5	29	2	.01
MAY												
04...	0925	1.3	500	6.5	13.0	110	15.8	16.5	.68	12	8	.03
JUN												
17...	0855	1.2	500	11.5	--	--	3.15	4.00	.00	6.0	3	.01
JUL												
20...	1315	1.1	500	15.0	11.0	114	5.46	10.2	1.5	12	2	.01
AUG												
24...	0915	1.1	520	10.5	--	--	37.0	222	4.6	46	10	.03
SEP												
28...	0940	1.1	510	7.0	--	--	29.5	33.0	.81	30	26	.08

05409860 SOUTH FORK NEDERLO CREEK NEAR GAYS MILLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method			
Nov. 4, 1975	1045	CHRYSOPHYTA			Grab sample			
		Bacillariophyceae						
		<i>Achnanthes</i>	110	42				
		<i>Cocconeis</i>	44	16				
		<i>Cymbella</i>		0				
		<i>Diatoma</i>		0				
		<i>Gomphonema</i>	29	11				
		<i>Melosira</i>		0				
		<i>Navicula</i>	29	11				
		<i>Nitzschia</i>	44	16				
		<i>Rhoicosphenia</i>	14	5				
		EUGLENOPHYTA						
		Euglenophyceae						
		<i>Trachelomonas</i>		0				
TOTAL	280							
Dec. 16, 1975	1110	CHLOROPHYTA			Grab sample			
		Chlorophyceae						
		<i>Scenedesmus</i>	13	8				
		<i>Tetraedron</i>		0				
		CHRYSOPHYTA						
		Bacillariophyceae						
		<i>Achnanthes</i>	30	19				
		<i>Cocconeis</i>	43	27				
		<i>Cyclotella</i>	4	3				
		<i>Cymbella</i>		0				
		<i>Diatoma</i>	4	3				
		<i>Gomphonema</i>	17	11				
		<i>Navicula</i>	21	14				
		<i>Nitzschia</i>	13	8				
<i>Rhoicosphenia</i>	9	5						
<i>Synedra</i>	4	3						
TOTAL	160							
Jan. 27, 1976	1130	CHRYSOPHYTA			Grab sample			
		Bacillariophyceae						
		<i>Achnanthes</i>	53	29				
		<i>Cocconeis</i>	53	29				
		<i>Gomphonema</i>	42	24				
		<i>Navicula</i>	11	6				
		<i>Nitzschia</i>	11	6				
		<i>Rhoicosphenia</i>	11	6				
		<i>Surirella</i>		0				
		<i>Synedra</i>		0				
		TOTAL	180					
		Mar. 2, 1976	1220	CHRYSOPHYTA				Grab sample
				Bacillariophyceae				
				<i>Achnanthes</i>		77	39	
<i>Cocconeis</i>				0				
<i>Gomphonema</i>	66			33				
<i>Navicula</i>	33			17				
<i>Nitzschia</i>	22			11				
<i>Rhoicosphenia</i>				0				
<i>Surirella</i>				0				
CYANOPHYTA								
Myxophyceae								
<i>Oscillatoria</i>				0				
TOTAL	200							
Apr. 6, 1976	1020			CHRYSOPHYTA			Grab sample	
		Bacillariophyceae						
		<i>Achnanthes</i>	220	39				
		<i>Cocconeis</i>		0				
		<i>Cymbella</i>		0				
		<i>Gomphonema</i>	25	4				
		<i>Meridion</i>	25	4				
		<i>Navicula</i>	120	22				
		<i>Nitzschia</i>	120	22				
		<i>Rhoicosphenia</i>		0				
		<i>Surirella</i>	50	9				
		CYANOPHYTA						
		Myxophyceae						
		<i>Oscillatoria</i>		0				
TOTAL	570							

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PERIPHYTON

Date	Length of exposure (days)	Organism	Sampling method	
Nov. 4, 1975	39	CHLOROPHYTA	Polyethylene strip	
		Chlorophyceae		
		<i>Oedogonium</i>		P
		<i>Stigeoclonium</i>		E
		<i>Ulothrix</i>		P
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Achnanthes</i>		P
		<i>Amphora</i>		P
		<i>Cocconeis</i>		E
		<i>Cymbella</i>		P
		<i>Gomphonema</i>		E
		<i>Melosira</i>		P
		<i>Navicula</i>		P
		<i>Nitzschia</i>		P
		<i>Rhoicosphenia</i>		P
		CYANOPHYTA		
		Myxophyceae		
		<i>Lyngbya</i>		P
		Dec. 16, 1975		41	CHLOROPHYTA	Polyethylene strip
Chlorophyceae				
<i>Oedogonium</i>	P			
<i>Stigeoclonium</i>	P			
<i>Ulothrix</i>	P			
CHRYSOPHYTA				
Bacillariophyceae				
<i>Achnanthes</i>	E			
<i>Cocconeis</i>	P			
<i>Cymatopleura</i>	P			
<i>Cymbella</i>	P			
<i>Diatoma</i>	P			
<i>Gomphonema</i>	E			
<i>Hantzschia</i>	P			
<i>Melosira</i>	P			
<i>Navicula</i>	P			
<i>Nitzschia</i>	P			
<i>Pinnularia</i>	P			
<i>Rhoicosphenia</i>				
<i>Rhoicosphenia</i>	<i>curvata</i> P			
<i>Synedra</i>	P			
CYANOPHYTA				
Myxophyceae				
<i>Oscillatoria</i>	P			
Jan. 27, 1976	42	CHLOROPHYTA	Polyethylene strip	
		Chlorophyceae		
		<i>Oedogonium</i>		P
		<i>Ulothrix</i>		E
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Achnanthes</i>		E
		<i>Amphora</i>		P
		<i>Cocconeis</i>		P
		<i>Cymbella</i>		P
		<i>Diatoma</i>		P
		<i>Gomphonema</i>		E
		<i>Melosira</i>		P
		<i>Navicula</i>		P
		<i>Nitzschia</i>		P
		<i>Pinnularia</i>		P
		<i>Rhoicosphenia</i>		P
		<i>Surirella</i>		P
		<i>Synedra</i>		P
		CYANOPHYTA		
Myxophyceae				
<i>Oscillatoria</i>	P			

P Present
E Estimated dominant

05409860 SOUTH FORK NEDERLO CREEK NEAR GAYS MILLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
May 4, 1976	0925	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ulothrix</i>		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	330	60	
		<i>Cocconeis</i>		0	
		<i>Cyclotella</i>	22	4	
		<i>Diatome</i>		0	
		<i>Fragilaria</i>		0	
		<i>Gomphonema</i>	22	4	
		<i>Meridion</i>	22	4	
		<i>Navicula</i>		0	
		<i>Nitzschia</i>	130	24	
		<i>Surirella</i>	22	4	
		<i>Synedra</i>		0	
		CYANOPHYTA			
Myxophyceae					
<i>Oscillatoria</i>		0			
TOTAL	550				
June 17, 1976	0855	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Ankistrodesmus</i>	26	5	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	100	19	
		<i>Cymbella</i>	52	10	
		<i>Gomphonema</i>	26	5	
		<i>Melosira</i>	52	10	
		<i>Nitzschia</i>	290	52	
TOTAL	550				
July 20, 1976	1315	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	69	14	
		<i>Cocconeis</i>	230	46	
		<i>Cymbella</i>	17	4	
		<i>Fragilaria</i>	17	4	
		<i>Gomphonema</i>	17	4	
		<i>Melosira</i>		0	
		<i>Navicula</i>	87	18	
		<i>Nitzschia</i>	35	7	
		EUGLENOPHYTA			
		Cryptophyceae			
		<i>Cryptomonas</i>	17	4	
TOTAL	490				
Aug. 24, 1976	0915	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	16	3	
		<i>Cocconeis</i>	48	10	
		<i>Cymbella</i>	48	10	
		<i>Gomphonema</i>	150	31	
		<i>Nitzschia</i>	160	34	
		<i>Synedra</i>	48	10	
TOTAL	470				
Sept. 28, 1976	0940	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Cocconeis</i>	64	12	
		<i>Cymatopleura</i>	11	2	
		<i>Cymbella</i>	54	10	
		<i>Fragilaria</i>	110	20	
		<i>Gomphonema</i>	110	20	
		<i>Melosira</i>	21	4	
		<i>Navicula</i>	75	14	
		<i>Neidium</i>		0	
		<i>Nitzschia</i>	64	12	
		<i>Pinnularia</i>		0	
		<i>Synedra</i>	21	4	
TOTAL	530				

WISCONSIN RIVER BASIN

95409860 SOUTH FORK NEDERLO CREEK NEAR GAYS MILLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PERIPHYTON

Date	Length of exposure (days)	Organism	Sampling method			
Apr. 6, 1976	35	CHLOROPHYTA	Polyethylene strip			
		Chlorophyceae				
		<i>Oedogonium</i> P				
		<i>Stigeoclonium</i> P				
		<i>Ulothrix</i> P				
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Achnanthes</i> E				
		<i>Cymbella</i> P				
		<i>Gomphonema</i> E				
		<i>Navicula</i> P				
		<i>Nitzschia</i> P				
		<i>Surirella</i> P				
		CYANOPHYTA				
		Myxophyceae				
		<i>Lyngbya</i> P				
		<i>Oscillatoria</i> P				
May 4, 1976	30	CHLOROPHYTA	Polyethylene strip			
		Chlorophyceae				
		<i>Oedogonium</i> E				
		<i>Ulothrix</i> P				
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Achnanthes</i> P				
		<i>Anomoeoneis</i> P				
		<i>Cocconeis</i> P				
		<i>Cymatopleura</i> P				
		<i>Cymbella</i> P				
		<i>Diatoma</i> P				
		<i>Fragilaria</i> P				
		<i>Gomphonema</i> E				
		<i>Meridion</i> P				
		<i>Navicula</i> P				
		<i>Nitzschia</i> P				
		<i>Pinnularia</i> P				
		<i>Rhoicosphenia</i> P				
		<i>Surirella</i> P				
		<i>Synedra</i> P				
		CYANOPHYTA				
		Myxophyceae				
		<i>Agmenellum</i> P				
		<i>Oscillatoria</i> P				
		June 17, 1976		44	CHLOROPHYTA	Polyethylene strip
					Chlorophyceae	
					<i>Stigeoclonium</i> E	
					CHRYSOPHYTA	
					Bacillariophyceae	
					<i>Achnanthes</i> P	
					<i>Cocconeis</i> E	
					<i>Navicula</i> P	
<i>Nitzschia</i> P						
<i>Synedra</i> P						
CYANOPHYTA						
Myxophyceae						
<i>Lyngbya</i> E						
July 20, 1976	33	CHLOROPHYTA	Polyethylene strip			
		Chlorophyceae				
		<i>Mougeotia</i> P				
		<i>Oedogonium</i> P				
		<i>Stigeoclonium</i> E				
		<i>Ulothrix</i> P				
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Cocconeis</i> E				
		<i>Cymbella</i> P				
		<i>Fragilaria</i> P				
		<i>Gomphonema</i> P				
		<i>Melosira</i> P				
		<i>Navicula</i> P				
		<i>Nitzschia</i> P				
		<i>Pinnularia</i> P				
		<i>Rhoicosphenia</i> P				
<i>Synedra</i> P						
CYANOPHYTA						
Myxophyceae						
<i>Oscillatoria</i> P						

P Present
E Estimated dominant

05409860 SOUTH FORK NEDERLO CREEK NEAR GAYS MILLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PERIPHYTON

Date	Length of exposure (days)	Organism	Sampling method			
Aug. 24, 1976	35	CHLOROPHYTA	Polyethylene strip			
		Chlorophyceae				
		<i>Mougeotia</i> E				
		<i>Oedogonium</i> E				
		<i>Scenedesmus</i> P				
		<i>Spirogyra</i> P				
		<i>Stigeoclonium</i> E				
		<i>Ulothrix</i> E				
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Achnanthes</i> P				
		<i>Cocconeis</i> P				
		<i>Cymbella</i> P				
		<i>Diatoma</i> P				
		<i>Fragilaria</i> P				
		<i>Gomphonema</i> E				
		<i>Melosira</i> P				
		<i>Meridion</i> P				
		<i>Navicula</i> P				
		<i>Nitzschia</i> P				
		<i>Rhoicosphenia</i> P				
		<i>Synedra</i> P				
		Xanthophyceae				
		<i>Vaucheria</i> P				
		CYANOPHYTA				
		Myxophyceae				
		<i>Agmenellum</i> P				
		<i>Lyngbya</i> P				
		<i>Oscillatoria</i> P				
		Sept. 28, 1976		35	CHLOROPHYTA	Polyethylene strip
					Chlorophyceae	
					<i>Oedogonium</i> P	
					<i>Stigeoclonium</i> P	
<i>Ulothrix</i> P						
CHRYSOPHYTA						
Bacillariophyceae						
<i>Achnanthes</i> E						
<i>Amphora</i> P						
<i>Cocconeis</i> E						
<i>Cymbella</i> E						
<i>Diatoma</i> P						
<i>Fragilaria</i> P						
<i>Gomphonema</i> E						
<i>Melosira</i> P						
<i>Navicula</i> E						
<i>Nitzschia</i> P						
<i>Synedra</i> P						
CYANOPHYTA						
Myxophyceae						
<i>Lyngbya</i> P						

P Present
E Estimated dominant

WISCONSIN RIVER BASIN

05409860 SOUTH FORK NEDERLO CREEK NEAR GAYS MILLS, WI--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.5	8.0	9.5	11.5	7.5	9.0	4.5	1.0	3.0	5.5	3.5	4.5
2	12.5	6.0	8.5	9.5	6.5	8.0	6.0	2.5	4.0	4.5	1.5	3.5
3	14.0	7.0	9.5	11.5	9.5	9.5	5.0	3.5	4.0	1.5	0.5	0.5
4	14.5	7.5	10.0	12.5	8.5	10.0	7.0	3.0	4.5	0.5	0.5	0.5
5	13.5	8.0	10.0	10.5	8.0	9.5	10.5	5.0	8.0	2.0	0.5	1.0
6	14.0	7.5	10.0	11.5	9.5	10.0	6.0	1.5	3.0	4.5	2.0	3.5
7	14.5	7.5	10.0	11.5	9.0	10.0	6.0	2.0	4.0	2.0	0.5	0.5
8	13.5	8.5	10.5	10.0	7.5	9.0	6.5	4.0	5.0	0.5	0.5	0.5
9	14.0	9.0	11.0	9.5	9.0	9.0	6.0	3.5	4.5	0.5	0.5	0.5
10	12.5	7.5	9.5	9.5	6.0	8.0	7.0	4.0	5.5	2.5	0.5	1.5
11	13.0	7.0	9.0	8.5	5.5	7.0	5.5	4.0	4.5	4.5	2.5	3.5
12	14.5	7.5	10.5	8.0	6.0	7.0	5.5	3.0	4.0	5.5	1.5	3.5
13	16.5	9.5	12.0	7.0	4.0	5.5	8.0	5.5	6.5	5.0	2.5	4.0
14	15.0	10.0	11.5	7.5	3.0	4.5	9.0	4.0	7.5	4.0	1.0	2.5
15	10.5	7.5	9.0	9.0	4.5	6.5	4.5	2.0	3.0	4.0	1.5	2.5
16	11.5	6.0	8.5	10.0	5.0	7.0	4.0	0.0	2.5	3.5	0.5	2.0
17	12.0	6.0	8.5	10.5	6.5	8.0	0.5	0.0	0.0	1.0	0.5	0.5
18	11.0	5.5	7.5	10.0	7.5	8.5	0.5	0.0	0.5	2.0	0.5	1.0
19	10.0	5.0	7.5	11.5	8.5	9.5	4.5	0.5	3.0	5.5	2.0	4.0
20	11.5	6.0	8.5	9.0	7.5	8.5	4.5	2.5	3.5	3.5	0.5	2.0
21	12.0	7.0	9.0	7.5	4.0	5.5	4.5	1.0	2.5	5.0	2.5	3.5
22	12.5	7.5	9.5	6.5	3.0	4.0	4.5	1.5	3.0	4.5	1.5	3.0
23	13.5	9.5	11.5	6.5	2.5	4.5	5.5	3.5	4.5	5.5	3.0	4.0
24	13.0	8.5	11.0	5.5	3.0	4.5	4.5	3.5	4.0	6.0	3.0	4.0
25	10.0	7.0	8.0	4.5	1.5	3.0	5.5	4.0	5.0	5.0	2.5	3.5
26	9.5	5.0	7.5	4.0	0.5	2.5	4.5	3.0	3.5	3.0	0.0	2.0
27	12.0	7.0	9.0	6.5	2.5	4.0	4.0	3.0	3.5	0.5	0.0	0.5
28	11.5	7.0	9.5	5.5	3.0	4.5	5.5	3.5	4.0	5.0	0.0	2.5
29	9.5	4.5	6.5	7.0	5.5	6.5	5.5	3.0	4.5	4.5	0.5	2.5
30	9.5	4.5	7.0	7.5	1.5	4.5	5.5	5.0	5.0	4.5	1.5	2.5
31	10.5	7.5	9.0	---	---	---	5.5	3.5	5.0	5.0	0.0	2.5
MONTH	16.5	4.5	9.5	12.5	0.5	7.0	10.5	0.0	4.0	6.0	0.0	2.5

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	4.5	0.0	1.5	3.0	2.0	2.0	12.0	5.5	7.5	16.0	7.0	10.5
2	0.0	0.0	0.0	4.5	3.0	3.5	14.5	4.0	8.5	13.5	7.5	9.5
3	2.0	0.0	0.5	7.5	4.5	5.5	13.5	6.0	8.5	12.5	7.0	8.5
4	2.5	0.0	1.0	4.5	0.5	2.5	14.5	4.5	8.5	17.0	5.5	10.5
5	3.5	0.0	1.5	7.0	1.0	4.0	16.0	5.0	8.0	14.5	8.5	11.5
6	3.5	0.0	1.0	7.5	0.5	3.0	16.5	5.5	10.0	16.0	7.0	10.5
7	4.5	0.0	1.5	8.5	2.5	5.0	16.0	5.5	9.5	17.5	6.0	10.5
8	6.5	3.0	4.0	8.0	1.5	4.5	15.5	5.0	9.0	18.5	6.0	11.5
9	6.5	2.0	4.0	8.0	4.5	6.0	16.0	5.0	9.5	20.5	8.5	13.5
10	7.5	2.5	5.0	10.0	1.5	5.5	13.0	7.0	9.5	20.5	8.5	13.5
11	6.0	1.5	3.0	9.5	1.0	3.0	14.5	5.0	9.0	19.5	8.5	12.5
12	8.0	0.5	3.0	1.0	0.0	0.5	15.5	4.5	9.0	19.5	7.5	12.5
13	6.0	1.5	3.0	8.5	0.5	3.5	17.0	5.5	10.5	11.5	10.0	10.5
14	7.0	1.0	3.5	8.0	2.0	5.0	14.0	8.0	11.0	21.0	9.0	13.5
15	5.5	0.5	3.5	8.0	1.5	4.5	15.5	10.0	12.0	12.0	9.0	11.0
16	5.5	2.5	4.0	8.0	2.0	3.5	16.0	9.5	13.0	12.0	10.0	11.0
17	5.5	4.5	5.0	8.5	1.0	4.5	15.5	11.5	13.0	19.0	9.0	12.5
18	6.0	3.0	4.5	10.0	2.5	5.5	15.5	9.5	12.0	20.0	7.5	12.5
19	7.5	3.0	5.0	13.0	3.5	7.0	15.5	7.5	10.5	21.0	8.5	14.0
20	6.0	2.5	4.5	12.5	6.0	9.0	12.5	7.0	9.5	22.5	11.5	15.5
21	4.0	0.5	2.5	10.0	3.0	5.5	9.5	8.5	9.0	21.5	9.5	14.5
22	6.5	0.5	3.0	11.0	1.5	5.5	16.5	7.5	11.0	13.5	10.0	12.0
23	7.0	0.0	3.0	12.5	3.5	7.5	11.0	7.5	9.0	18.5	9.0	12.5
24	10.0	2.0	5.0	13.0	6.0	8.5	9.0	7.0	8.5	19.5	8.5	13.0
25	9.5	2.5	5.0	12.5	4.5	8.0	15.0	6.5	9.5	20.0	8.5	13.5
26	10.0	0.5	4.0	10.5	7.5	9.0	16.0	5.5	10.0	21.5	9.0	14.0
27	5.5	0.0	1.0	11.5	5.5	8.0	16.5	6.0	10.5	19.5	9.5	13.5
28	5.5	0.0	2.0	13.5	4.0	8.5	17.5	6.0	11.0	16.5	9.5	12.5
29	5.0	1.5	3.0	9.0	8.0	8.5	16.0	6.5	11.0	16.5	11.0	13.5
30	---	---	---	8.0	6.5	7.5	16.5	9.0	11.5	16.5	11.0	13.0
31	---	---	---	8.0	6.0	7.0	---	---	---	19.0	11.0	14.0
MONTH	10.0	0.0	3.0	13.5	0.0	5.5	17.5	4.0	10.0	22.5	5.5	12.5

05409860 SOUTH FORK NEDERLO CREEK NEAR GAYS MILLS, WI--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.0	11.5	14.5	21.5	10.5	15.0	---	---	---	17.0	11.5	13.5
2	22.0	10.0	14.5	21.0	10.5	15.0	20.0	13.0	17.0	17.5	10.5	13.0
3	22.0	9.5	14.5	22.5	10.5	15.5	20.0	10.0	14.0	18.5	11.0	14.0
4	22.5	9.5	15.0	21.5	11.0	15.5	17.0	10.5	13.5	17.0	9.5	12.5
5	23.0	10.0	15.5	22.0	11.0	16.0	16.5	12.0	14.0	17.0	9.0	12.0
6	23.0	10.5	15.5	23.0	11.5	16.5	19.5	10.5	14.0	17.5	9.5	13.0
7	23.5	11.0	16.0	21.5	13.5	16.5	19.5	9.5	13.5	19.0	10.5	13.5
8	23.5	11.0	16.0	23.0	11.5	16.5	20.0	9.5	13.5	18.0	10.0	13.5
9	23.0	11.5	16.5	25.0	13.0	18.0	20.0	10.0	14.0	15.5	10.0	12.5
10	22.5	12.0	16.5	24.5	14.0	19.0	20.0	12.0	15.0	16.0	8.0	11.0
11	25.0	12.5	17.5	25.0	15.0	19.0	19.0	12.0	14.5	17.0	8.5	12.0
12	23.5	13.0	17.5	22.5	12.0	16.5	19.5	11.5	14.5	17.5	9.0	12.5
13	25.5	12.5	17.0	24.0	12.0	17.0	20.5	11.0	14.5	16.0	10.0	13.0
14	22.5	12.5	16.5	22.5	13.5	17.0	15.5	12.0	13.5	16.5	12.0	13.5
15	20.0	13.5	15.5	22.0	13.0	16.5	18.5	10.0	13.0	12.5	11.0	11.5
16	20.5	12.0	15.0	20.5	11.5	15.5	16.0	8.5	12.0	16.0	8.5	11.5
17	22.0	11.0	15.5	21.0	10.5	15.0	17.0	11.0	13.0	14.5	9.0	11.5
18	17.5	12.5	14.5	22.5	11.0	16.0	21.0	11.5	15.0	16.5	8.5	11.5
19	20.5	10.0	14.5	17.5	13.0	14.5	20.5	12.0	15.0	12.5	10.0	11.0
20	23.0	10.5	15.5	14.5	14.0	14.0	20.0	11.0	14.5	15.0	10.5	12.0
21	23.5	10.5	16.0	---	---	---	20.5	10.5	14.5	14.0	8.5	10.5
22	22.0	11.0	15.5	---	---	---	20.0	11.0	14.5	13.5	7.0	10.0
23	19.5	12.5	15.5	---	---	---	18.5	11.5	13.0	13.5	7.5	9.5
24	14.0	12.5	13.5	---	---	---	19.0	10.5	14.0	13.5	6.0	9.0
25	22.5	10.5	15.5	---	---	---	16.5	11.5	13.5	13.0	7.5	9.5
26	20.5	12.0	16.0	---	---	---	18.5	11.5	14.0	14.5	7.5	10.5
27	23.0	12.5	16.5	---	---	---	20.0	11.5	14.5	11.0	9.0	10.0
28	24.0	13.0	17.0	---	---	---	17.5	10.0	13.0	13.5	7.0	9.5
29	16.0	12.5	13.5	---	---	---	17.0	9.0	12.0	14.5	7.5	10.0
30	21.5	12.0	15.5	---	---	---	18.5	10.0	13.5	14.5	7.5	10.0
31	---	---	---	---	---	---	18.5	11.0	14.0	---	---	---
MONTH	25.5	9.5	15.5	---	---	---	21.0	8.5	14.0	19.0	6.0	11.5

WISCONSIN RIVER BASIN

05409870 NEDERLO CREEK AT UTICA TOWN HALL NEAR GAYS MILLS, WI

LOCATION.--LAT 43°21'30", LONG 90°53'49", IN NW 1/4 SEC.7, T.10 N., R.4 W., CRAWFORD COUNTY, HYDROLOGIC UNIT 07070006, AT GAGING STATION ON LEFT BANK JUST UPSTREAM FROM BRIDGE ON TOWN ROAD 0.1 MI (0.2 KM) SOUTH OF JUNCTION OF TWO TOWN ROADS, AND 3.0 MI (4.8 KM) NORTHWEST OF GAYS MILLS.

DRAINAGE AREA.--6.7 MI² (17.6 KM²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--NOVEMBER 1967 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: NOVEMBER 1967 TO SEPTEMBER 1972, OCTOBER 1973 TO CURRENT YEAR.

INSTRUMENTATION.--TEMPERATURE RECORDER SINCE NOVEMBER 1, 1967.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: MAXIMUM, 26.5°C JUNE 29, JULY 2, 1970; MINIMUM, 0.0°C ON MANY DAYS DURING WINTER PERIODS.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: MAXIMUM, 25.5°C JUNE 11; MINIMUM, 0.0°C ON MANY DAYS DURING WINTER PERIOD.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M
NOV , 1975										
04...	0930	2.7	520	10.0	11.4	106	150	160	.60	28
DEC										
16...	1000	2.9	510	3.0	13.0	101	52.0	55.0	.00	39
JAN , 1976										
27...	1305	2.7	--	.0	14.0	101	97.0	100	.00	42
MAR										
02...	1100	3.1	500	3.0	12.6	98	.500	.900	.00	1.2
06...	0910	3.4	520	7.0	15.0	129	27.0	30.0	.00	26
MAY										
04...	1105	3.4	500	10.0	13.3	123	100	107	.00	67
JUN										
17...	0940	2.9	500	13.5	--	--	8.15	9.77	.00	8.2
JUL										
20...	1430	2.9	500	16.5	11.6	123	42.4	47.5	.00	33
AUG										
24...	1020	2.7	500	13.5	--	--	16.5	27.5	.00	40
SEP										
28...	1016	2.7	510	8.0	--	--	5.85	9.38	1.6	24

05409870 NEDERLO CREEK AT UTICA TOWN HALL NEAR GAYS MILLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Nov. 4, 1975	0930	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	92	18	
		<i>Cocconeis</i>	65	13	
		<i>Cymatopleura</i>		0	
		<i>Cymbella</i>		0	
		<i>Gomphonema</i>	39	8	
		<i>Melosira</i>		0	
		<i>Navicula</i>	79	15	
		<i>Nitzschia</i>	220	44	
		<i>Surirella</i>	13	3	
		<i>Synedra</i>		0	
		TOTAL	510		
Dec. 16, 1975	1000	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	65	29	
		<i>Amphora</i>		0	
		<i>Cocconeis</i>	35	16	
		<i>Cymbella</i>	6	3	
		<i>Fragilaria</i>	6	3	
		<i>Gomphonema</i>	35	16	
		<i>Navicula</i>	23	11	
		<i>Nitzschia</i>	29	13	
		<i>Rhicosphenia</i>		0	
		<i>Surirella</i>	12	5	
		<i>Synedra</i>	12	5	
TOTAL	220				
Jan. 27, 1976	1305	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	200	43	
		<i>Cocconeis</i>	34	7	
		<i>Cymatopleura</i>	17	4	
		<i>Cymbella</i>		0	
		<i>Diatoma</i>		0	
		<i>Gomphonema</i>	67	14	
		<i>Navicula</i>	50	11	
		<i>Nitzschia</i>	84	18	
		<i>Rhicosphenia</i>		0	
		<i>Surirella</i>	17	4	
		TOTAL	470		
Mar. 2, 1976	1100	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	71	26	
		<i>Cocconeis</i>	12	4	
		<i>Cymbella</i>		0	
		<i>Gomphonema</i>	71	26	
		<i>Navicula</i>	110	39	
		<i>Nitzschia</i>	12	4	
		<i>Surirella</i>		0	
		<i>Synedra</i>		0	
		Chrysophyceae		0	
		<i>Ochromonas</i>		0	
		TOTAL	270		
Apr. 6, 1976	0910	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	210	45	
		<i>Gomphonema</i>	23	5	
		<i>Meridion</i>		0	
		<i>Navicula</i>	23	5	
		<i>Nitzschia</i>	92	20	
		<i>Surirella</i>	110	25	
		CYANOPHYTA			
		Myxophyceae			
		<i>Oscillatoria</i>		0	
		EUGLENOPHYTA			
		Euglenophyceae			
<i>Euglena</i>		0			
<i>Phacus</i>		0			
TOTAL	460				

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method	
May 4, 1976	1105	CHRYSOPHYTA			Grab sample	
		Bacillariophyceae				
		<i>Achnanthes</i>	110	38		
		<i>Cocconeis</i>		0		
		<i>Cymbella</i>		0		
		<i>Diatoma</i>		0		
		<i>Fragilaria</i>	22	8		
		<i>Gomphonema</i>	11	4		
		<i>Navicula</i>	34	12		
		<i>Nitzschia</i>	90	31		
		<i>Stauroneis</i>		0		
		<i>Surirella</i>	22	8		
		<i>Synedra</i>		0		
		CYANOPHYTA				
		Myxophyceae				
		<i>Oscillatoria</i>		0		
		EUGLENOPHYTA				
Euglenophyceae						
<i>Euglena</i>		0				
<i>Phacus</i>		0				
TOTAL		290				
June 17, 1976	0940	CHRYSOPHYTA			Grab sample	
		Bacillariophyceae				
		<i>Achnanthes</i>	54	8		
		<i>Cocconeis</i>	54	8		
		<i>Cymbella</i>	27	4		
		<i>Gomphonema</i>	27	4		
		<i>Navicula</i>	81	12		
		<i>Nitzschia</i>	300	46		
		CYANOPHYTA				
		Myxophyceae				
		<i>Anabaena</i>	110	17		
		TOTAL		650		
		July 20, 1976	1430	CHLOROPHYTA				Grab sample
Chlorophyceae						
<i>Scenedesmus</i>	21			2		
CHRYSOPHYTA						
Bacillariophyceae						
<i>Achnanthes</i>	170			15		
<i>Cocconeis</i>	190			17		
<i>Cymbella</i>	64			6		
<i>Gomphonema</i>	64			6		
<i>Navicula</i>	280			25		
<i>Nitzschia</i>	110			9		
<i>Synedra</i>	21			2		
CYANOPHYTA						
Myxophyceae						
<i>Oscillatoria</i>	210			19		
TOTAL				1,100		
Aug. 24, 1976	1020			CHLOROPHYTA			Grab sample
		Chlorophyceae				
		<i>Carteria</i>	30	2		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Achnanthes</i>	270	17		
		<i>Amphora</i>	30	2		
		<i>Cocconeis</i>	180	11		
		<i>Cyclotella</i>		0		
		<i>Cymbella</i>	60	4		
		<i>Fragilaria</i>	30	2		
		<i>Gomphonema</i>	120	7		
		<i>Navicula</i>	330	20		
		<i>Nitzschia</i>	270	17		
		<i>Synedra</i>		0		
		CYANOPHYTA				
		Myxophyceae				
<i>Oscillatoria</i>	300	19				
TOTAL		1,600				
Sept. 28, 1976	1016	CHRYSOPHYTA			Grab sample	
		Bacillariophyceae				
		<i>Cymatopleura</i>	3	4		
		<i>Cymbella</i>	3	4		
		<i>Gomphonema</i>	3	4		
		<i>Navicula</i>	66	77		
		<i>Nitzschia</i>	10	12		
TOTAL		86				

05409870 NEDERLO CREEK AT UTICA TOWN HALL NEAR GAYS MILLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PERIPHYTON

Date	Length of exposure (days)	Organism	Sampling method				
Nov. 4, 1975	39	CHLOROPHYTA	Polyethylene strip				
		Chlorophyceae					
		<i>Oedogonium</i>		P			
		<i>Ulothrix</i>		P			
		CHRYSOPHYTA					
		Bacillariophyceae					
		<i>Achnanthes</i>		E			
		<i>Cocconeis</i>		P			
		<i>Cyclotella</i>		P			
		<i>Cymatopleura</i>		P			
		<i>Cymbella</i>		E			
		<i>Diatoma</i>		P			
		<i>Fragilaria</i>		P			
		<i>Gomphonema</i>		E			
		<i>Melosira</i>		P			
		<i>Meridion</i>		P			
		<i>Navicula</i>		P			
		<i>Nitzschia</i>		P			
		<i>Surirella</i>		P			
		<i>Synedra</i>		P			
		CYANOPHYTA					
		Myxophyceae					
		<i>Agmenellum</i>		P			
		<i>Lyngbya</i>		P			
		<i>Oscillatoria</i>		P			
		Dec. 16, 1975		41	CHLOROPHYTA	Polyethylene strip	
					Chlorophyceae		
<i>Stigeoclonium</i>	P						
<i>Ulothrix</i>	P						
CHRYSOPHYTA							
Bacillariophyceae							
<i>Achnanthes</i>	E						
<i>Cocconeis</i>	P						
<i>Cymatopleura</i>	P						
<i>Cymbella</i>	P						
<i>Diatoma</i>	P						
<i>Gomphonema</i>	P						
<i>Navicula</i>	P						
<i>Nitzschia</i>	E						
<i>Pinnularia</i>	P						
<i>Surirella</i>	P						
<i>Synedra</i>	P						
CYANOPHYTA							
Myxophyceae							
<i>Oscillatoria</i>	P						
Jan. 27, 1976	42		CHLOROPHYTA		Polyethylene strip		
			Chlorophyceae				
			<i>Stigeoclonium</i>				P
			CHRYSOPHYTA				
			Bacillariophyceae				
			<i>Achnanthes</i>				E
			<i>Cocconeis</i>				P
		<i>Cymatopleura</i>	P				
		<i>Cymbella</i>	P				
		<i>Fragilaria</i>	P				
		<i>Gomphonema</i>	E				
		<i>Melosira</i>	P				
		<i>Navicula</i>	E				
		<i>Nitzschia</i>	P				
		<i>Opephora</i>	P				
		<i>Pinnularia</i>	P				
		<i>Rhoicosphenia</i>	P				
		<i>Surirella</i>	P				
		<i>Synedra</i>	P				
		CYANOPHYTA					
		Myxophyceae					
		<i>Oscillatoria</i>	P				

P Present
E Estimated dominant

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PERIPHYTON

Date	Length of exposure (days)	Organism	Sampling method	
Mar. 2, 1976	35	CHLOROPHYTA	Polyethylene strip	
		Chlorophyceae		
		<i>Stigeoclonium</i> E		
		<i>Ulothrix</i> P		
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Gomphonema</i> P		
		<i>Meridion</i> P		
		<i>Navicula</i> P		
		<i>Nitzschia</i> P		
		<i>Surirella</i> P		
CYANOPHYTA				
Myxophyceae				
<i>Oscillatoria</i> P				
Apr. 6, 1976	35	CHLOROPHYTA	Polyethylene strip	
		Chlorophyceae		
		<i>Stigeoclonium</i> P		
		<i>Ulothrix</i> E		
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Achnanthes</i> E		
		<i>Cocconeis</i> P		
		<i>Cymatopleura</i> P		
		<i>Cymbella</i> P		
		<i>Gomphonema</i> E		
		<i>Meridion</i> P		
		<i>Navicula</i> P		
		<i>Nitzschia</i> P		
		<i>Surirella</i> E		
		<i>Synedra</i> P		
		CYANOPHYTA		
		Myxophyceae		
		<i>Lyngbya</i> P		
		<i>Oscillatoria</i> P		
		May 4, 1976		30	CHLOROPHYTA	Polyethylene strip
Chlorophyceae				
<i>Closterium</i> P				
<i>Oedogonium</i> P				
<i>Stigeoclonium</i> E				
<i>Ulothrix</i> E				
CHRYSOPHYTA				
Bacillariophyceae				
<i>Achnanthes</i> E				
<i>Cocconeis</i> P				
<i>Cymatopleura</i> P				
<i>Cymbella</i> P				
<i>Diatoma</i> P				
<i>Fragilaria</i> P				
<i>Gomphonema</i> P				
<i>Melosira</i> P				
<i>Meridion</i> P				
<i>Navicula</i> P				
<i>Nitzschia</i> P				
<i>Pinnularia</i> P				
<i>Surirella</i> P				
<i>Synedra</i> P				
CYANOPHYTA				
Myxophyceae				
<i>Agmenellum</i> P				
June 17, 1976	44	CHLOROPHYTA	Polyethylene strip	
		Chlorophyceae		
		<i>Oedogonium</i> P		
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Achnanthes</i> E		
		<i>Cocconeis</i> E		
		<i>Cymatopleura</i> P		
		<i>Cymbella</i> P		
		<i>Gomphonema</i> P		
		<i>Melosira</i> P		
<i>Navicula</i> P				
<i>Nitzschia</i> P				
<i>Rhoicosphenia</i> P				
<i>Surirella</i> P				
<i>Synedra</i> P				
CYANOPHYTA				
Myxophyceae				
<i>Lyngbya</i> E				

P Present
E Estimated dominant

05409870 NEDERLO CREEK AT UTICA TOWN HALL NEAR GAYS MILLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PERIPHYTON

Date	Length of exposure (days)	Organism	Sampling method	
July 20, 1976	33	CHLOROPHYTA	Polyethylene strip	
		Chlorophyceae		
		<i>Cosmarium</i>		P
		<i>Oedogonium</i>		P
		<i>Scenedesmus</i>		E
		<i>Stigeoclonium</i>		E
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Achnanthes</i>		E
		<i>Cocconeis</i>		P
		<i>Cymbella</i>		P
		<i>Fragilaria</i>		P
		<i>Gomphonema</i>		E
		<i>Melosira</i>		P
		<i>Navicula</i>		P
		<i>Nitzschia</i>		P
		<i>Surirella</i>		P
		<i>Synedra</i>		P
		CYANOPHYTA		
		Myxophyceae		
		<i>Agmenellum</i>		P
		<i>Lyngbya</i>		P
		RHODOPHYTA		
Rhodophyceae				
<i>Audouinella</i>	P			
Aug. 24, 1976	35	CHLOROPHYTA	Polyethylene strip	
		Chlorophyceae		
		<i>Oedogonium</i>		P
		<i>Stigeoclonium</i>		E
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Achnanthes</i>		E
		<i>Cocconeis</i>		P
		<i>Cymatopleura</i>		P
		<i>Cymbella</i>		E
		<i>Diatoma</i>		P
		<i>Fragilaria</i>		P
		<i>Gomphonema</i>		P
		<i>Melosira</i>		P
		<i>Navicula</i>		P
		<i>Nitzschia</i>		P
		<i>Surirella</i>		P
		<i>Synedra</i>		P
		CYANOPHYTA		
		Myxophyceae		
		<i>Agmenellum</i>		P
		<i>Lyngbya</i>		P
		<i>Oscillatoria</i>		P
Sept. 28, 1976	35	CHLOROPHYTA	Polyethylene strip	
		Chlorophyceae		
		<i>Stigeoclonium</i>		P
		<i>Ulothrix</i>		P
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Achnanthes</i>		E
		<i>Cocconeis</i>		P
		<i>Cymbella</i>		P
		<i>Diatoma</i>		P
		<i>Gomphonema</i>		P
		<i>Navicula</i>		P
		<i>Nitzschia</i>		P
		<i>Synedra</i>		P
		CYANOPHYTA		
Myxophyceae				
<i>Lyngbya</i>	P			

P Present
E Estimated dominant

05409870 NEDERLD CREEK AT UTICA TOWN HALL NEAR GAYS MILLS, WIS.--CONTINUED

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT , 1975						APR , 1976					
01...	0035	--	2.9	41	.32	17...	0415	--	9.3	276	6.9
01...	1235	--	2.7	17	.12	17...	0445	--	11	731	22
02...	0030	--	2.7	29	.21	17...	0515	--	8.5	2230	51
02...	1230	--	2.7	17	.12	17...	0545	--	7.2	2480	48
03...	0030	--	2.7	101	.74	17...	0615	--	6.2	1850	31
03...	1230	--	2.7	13	.09	17...	1115	--	7.2	148	2.9
04...	0025	--	2.7	34	.25	17...	1145	--	7.0	181	3.4
04...	1225	--	2.7	16	.12	17...	1215	--	6.4	164	2.8
05...	0025	--	2.7	24	.17	18...	1115	--	4.1	37	.41
05...	1220	--	2.7	19	.14	19...	1115	--	3.9	23	.24
06...	0015	--	2.7	20	.15	19...	1945	--	7.4	135	2.7
06...	1215	--	2.7	11	.08	19...	2015	--	12	368	12
07...	0010	--	2.7	27	.20	19...	2045	--	15	1230	50
NOV						19...	2115	--	14	2830	107
04...	0930	10.0	2.7	12	.09	19...	2145	--	13	2000	70
04...	1200	--	2.9	27	.21	19...	2215	--	11	1180	35
05...	0010	--	2.9	26	.20	19...	2245	--	10	801	22
05...	1210	--	2.9	8	.06	MAY					
06...	0010	--	2.9	40	.31	04...	1105	10.0	3.4	20	.18
06...	1205	--	2.9	18	.14	JUN					
07...	0005	--	2.9	27	.21	17...	0940	13.5	2.9	2	.02
07...	1200	--	2.9	45	.35	17...	1515	--	2.7	28	.20
07...	2400	--	2.9	26	.20	18...	1515	--	2.9	13	.10
08...	1155	--	2.9	8	.06	19...	1515	--	2.7	9	.07
09...	0020	--	2.9	40	.31	21...	1500	--	2.7	26	.19
09...	1220	--	2.9	8	.06	22...	1500	--	2.9	39	.31
10...	0015	--	3.4	27	.25	23...	1500	--	2.9	17	.13
10...	1215	--	3.2	4	.03	24...	1500	--	3.6	29	.28
11...	0015	--	2.9	12	.09	25...	1500	--	2.7	25	.18
11...	1215	--	2.9	9	.07	26...	1500	--	2.9	65	.51
12...	0010	--	2.9	16	.13	27...	1500	--	2.5	63	.43
12...	1210	--	2.9	4	.03	28...	1500	--	2.7	21	.15
12...	2400	--	2.9	12	.09	29...	1500	--	2.7	25	.18
13...	1155	--	2.9	3	.02	30...	1445	--	2.7	25	.18
13...	2355	--	2.9	5	.04	JUL					
14...	1155	--	2.9	5	.04	01...	1445	--	2.7	16	.12
14...	2350	--	2.9	1	.01	02...	1445	--	2.7	19	.14
15...	1145	--	2.9	1	.01	03...	1445	--	2.7	28	.20
15...	2340	--	2.9	5	.04	04...	1445	--	2.7	21	.15
16...	1135	--	2.9	1	.01	05...	1445	--	2.5	32	.22
16...	2330	--	2.9	4	.03	06...	1445	--	2.5	85	.57
17...	1130	--	2.9	4	.03	07...	1445	--	2.7	25	.16
17...	2400	--	2.9	8	.06	08...	1445	--	2.5	27	.16
18...	1200	--	2.9	4	.03	19...	1415	--	3.4	47	.43
18...	2400	--	2.9	8	.06	20...	1415	--	2.9	16	.13
19...	1200	--	2.9	3	.02	20...	1430	16.5	2.9	1	.01
19...	2400	--	2.9	20	.16	21...	1415	--	2.7	18	.13
20...	1200	--	2.9	1	.01	22...	1415	--	2.7	15	.11
20...	2355	--	2.9	10	.08	23...	1415	--	2.9	8	.06
21...	1430	--	2.9	15	.12	24...	1415	--	2.9	8	.06
22...	1345	--	2.7	21	.15	25...	1415	--	2.9	8	.06
23...	1345	--	2.7	10	.07	26...	1415	--	3.2	19	.16
DEC						27...	1415	--	2.9	12	.09
16...	1000	3.0	2.9	28	.22	AUG					
JAN , 1976						24...	1020	13.5	2.7	14	.10
27...	1305	.0	2.7	16	.12	24...	1330	--	3.2	63	.54
APR						25...	1330	--	2.9	28	.22
06...	0910	7.0	3.4	2	.02	26...	1330	--	2.9	53	.41
06...	1145	--	3.4	36	.33	27...	1330	--	2.9	42	.33
07...	1130	--	3.2	29	.25	30...	1315	--	2.9	37	.29
08...	1130	--	3.2	73	.63	31...	1315	--	3.2	42	.36
09...	2000	--	7.2	139	2.7	SEP					
09...	2030	--	7.7	255	5.3	13...	1300	--	2.7	17	.12
09...	2100	--	7.2	525	10	14...	1300	--	2.7	12	.09
09...	2130	--	7.0	1030	19	15...	1300	--	2.7	17	.12
09...	2200	--	6.4	765	13	28...	1016	8.0	2.7	10	.07
15...	1130	--	3.6	27	.26						
16...	1130	--	3.9	46	.48						
16...	1430	--	7.4	120	2.4						
16...	1445	--	6.7	143	2.6						

05409870 NEDERLO CREEK AT UTICA TOWN HALL NEAR GAYS HILLS, WIS.--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.0	8.5	10.0	11.0	8.0	9.5	4.0	1.0	2.5	6.0	3.5	4.5
2	12.0	7.0	9.5	10.5	7.0	8.5	5.0	3.0	4.0	5.0	2.0	4.0
3	13.5	7.5	10.5	12.0	10.0	10.5	4.5	3.5	4.0	2.0	0.0	0.5
4	14.0	8.5	11.0	12.0	9.0	11.0	6.5	3.0	4.5	0.0	0.0	0.0
5	13.5	8.5	11.0	11.5	9.0	10.0	10.5	5.5	8.0	1.5	0.0	0.5
6	13.0	8.0	10.5	12.5	10.5	11.0	6.5	2.0	3.0	4.5	1.5	3.0
7	13.5	8.0	10.5	12.0	10.0	11.0	5.5	2.0	4.0	2.0	0.0	0.0
8	14.5	9.0	11.5	11.0	8.0	9.5	6.5	4.0	5.0	0.0	0.0	0.0
9	14.0	10.0	12.0	10.5	9.5	10.0	5.5	4.0	5.0	0.0	0.0	0.0
10	12.5	8.0	10.0	10.5	7.0	8.5	7.5	4.0	6.0	2.0	0.0	0.5
11	12.5	7.5	10.0	8.5	6.0	7.5	6.0	4.5	5.0	4.0	2.0	3.0
12	14.0	8.0	11.0	8.0	6.0	7.5	5.5	3.0	4.5	5.0	2.0	3.5
13	16.0	10.5	13.0	6.5	4.0	5.5	8.0	5.5	7.0	5.0	2.5	4.0
14	15.0	11.0	12.5	6.5	3.0	5.0	9.5	4.5	8.0	3.5	1.0	2.0
15	11.0	8.0	10.0	8.5	4.5	6.5	4.5	2.0	3.0	4.0	1.5	2.5
16	11.5	6.5	9.0	9.0	5.5	7.5	4.0	0.0	2.5	3.0	0.0	1.5
17	11.5	7.0	9.0	10.0	6.5	8.0	0.0	0.0	0.0	0.0	0.0	0.0
18	10.5	6.0	8.0	11.0	8.0	9.0	1.0	0.0	0.0	1.5	0.0	0.0
19	10.5	5.5	8.0	11.0	9.0	9.5	5.0	1.0	3.0	5.5	1.5	4.0
20	12.0	6.5	9.0	10.0	8.0	9.0	5.0	3.5	4.0	3.0	0.5	2.0
21	12.0	7.5	9.5	8.0	4.5	6.0	4.0	1.5	2.5	4.5	2.5	3.0
22	12.5	8.0	10.5	5.5	3.0	4.0	5.0	1.5	3.5	4.5	1.5	3.0
23	14.0	11.0	12.5	6.0	2.5	4.5	5.5	4.0	4.5	5.5	3.0	4.0
24	14.0	9.0	12.0	5.5	3.0	4.5	5.0	4.0	4.5	5.0	3.5	4.0
25	10.0	7.0	8.5	3.5	1.5	2.5	5.5	4.5	5.0	5.0	3.0	4.0
26	10.0	6.0	8.0	4.0	1.0	2.5	5.0	3.5	4.0	3.5	0.0	2.0
27	12.0	7.5	10.0	6.5	2.5	4.5	4.5	3.5	4.0	0.5	0.0	0.0
28	11.0	7.5	10.0	5.0	3.5	4.5	5.5	3.5	4.5	5.0	0.0	2.5
29	9.0	5.5	7.0	7.5	5.0	6.5	6.0	3.5	5.0	4.5	1.5	3.0
30	9.0	5.0	7.5	7.5	1.5	4.5	6.0	5.0	5.5	4.5	2.0	3.5
31	11.5	8.0	9.5	---	---	---	5.5	4.0	5.0	5.5	0.5	2.5
MONTH	16.0	5.0	10.0	12.5	1.0	7.5	10.5	0.0	4.0	6.0	0.0	2.0
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1										---	---	---
2										---	---	---
3										12.5	7.5	10.5
4										17.0	5.5	10.5
5										14.5	9.0	12.0
6										16.0	7.0	10.5
7										17.0	6.0	11.0
8										18.0	6.0	11.5
9										20.5	9.0	14.0
10										20.0	9.0	13.5
11										19.0	8.0	13.0
12										18.5	7.5	12.5
13										12.0	10.0	11.0
14										20.5	9.0	13.5
15										12.0	9.0	11.0
16										12.0	9.5	11.0
17										18.0	9.0	12.5
18										19.0	7.5	12.5
19										20.5	8.0	14.0
20										22.0	11.5	16.0
21										21.0	10.0	15.0
22										13.5	10.0	12.0
23										17.5	8.5	13.0
24										18.5	8.5	13.0
25										19.5	8.0	13.5
26										20.0	8.5	14.0
27										19.0	9.5	14.0
28										16.0	9.5	13.0
29										16.0	11.5	13.5
30										15.5	11.5	13.0
31										19.0	11.0	14.0
MONTH										22.0	5.5	12.5

WISCONSIN RIVER BASIN

05409870 NEDERLO CREEK AT UTICA TOWN HALL NEAR GAYS MILLS, WIS.--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.5	11.5	14.5	21.0	11.5	16.0	20.5	12.0	15.5	17.0	12.5	14.5
2	21.0	10.0	15.0	20.5	11.5	16.0	20.5	12.0	15.5	17.0	11.5	14.0
3	21.0	9.5	15.0	22.0	11.5	16.5	20.5	11.5	15.5	19.0	12.0	15.0
4	21.5	9.5	15.0	21.0	12.0	16.5	17.5	12.0	14.5	17.0	10.5	13.5
5	21.5	10.0	15.5	22.0	12.5	17.0	17.0	13.0	15.0	17.0	10.0	13.0
6	22.0	10.5	16.0	23.0	12.5	17.5	20.0	12.0	15.5	17.5	10.5	14.0
7	22.5	11.5	16.5	22.0	14.0	17.0	19.5	11.0	15.0	18.5	11.5	14.5
8	22.5	11.5	16.5	22.5	12.5	17.5	20.0	10.5	15.0	18.0	11.5	14.5
9	22.5	12.0	16.5	24.5	13.5	18.5	19.5	11.0	15.0	15.5	11.5	13.5
10	22.0	12.5	16.5	24.5	15.5	20.0	20.5	12.5	16.0	15.5	8.5	12.0
11	23.5	12.5	18.0	25.5	16.0	20.5	19.5	13.0	16.0	16.5	9.5	13.0
12	23.0	13.0	18.0	22.5	13.5	18.0	20.5	12.5	16.0	17.0	9.5	13.0
13	24.0	12.5	17.5	23.5	13.0	18.0	21.0	12.0	16.0	16.5	11.0	13.5
14	21.5	12.5	16.5	23.0	14.5	18.5	16.5	13.0	14.5	16.5	12.5	14.0
15	20.5	13.5	15.5	22.5	14.0	17.5	18.5	11.0	14.5	13.0	11.5	12.5
16	20.5	12.5	15.5	21.5	13.0	17.0	16.5	9.5	13.5	15.0	9.0	12.0
17	21.5	12.0	16.5	21.5	12.0	16.5	17.0	12.0	14.0	14.5	10.0	12.0
18	17.5	13.0	15.0	23.0	12.0	17.0	20.5	12.0	16.0	15.5	9.0	12.5
19	20.5	10.5	15.0	17.5	14.0	14.5	20.5	13.0	16.5	13.0	10.5	12.0
20	22.5	11.0	16.0	19.0	14.5	16.0	20.0	12.0	15.5	14.5	11.5	12.5
21	23.0	11.5	16.5	21.5	13.0	17.0	20.0	12.0	15.5	13.0	9.5	11.0
22	22.0	12.0	16.5	20.0	13.0	16.5	20.0	12.0	15.5	13.0	7.5	10.5
23	20.0	13.0	16.0	21.5	14.0	17.0	19.5	12.5	14.0	12.5	8.0	10.0
24	14.5	12.5	13.5	22.5	12.5	17.0	19.0	12.0	15.0	12.5	6.5	9.5
25	22.0	11.0	16.5	23.0	12.5	17.0	17.5	12.5	15.0	13.0	8.0	10.0
26	20.5	12.5	16.5	18.0	13.0	15.5	19.5	12.5	15.5	13.0	8.0	11.0
27	23.0	13.5	17.5	22.5	12.5	17.0	20.5	12.5	16.0	11.5	9.5	10.5
28	23.0	13.5	17.5	20.0	14.5	16.5	17.5	11.5	14.5	12.5	7.0	10.0
29	16.0	12.5	14.0	20.5	14.0	16.5	17.0	10.0	13.5	13.0	8.0	10.5
30	21.5	12.5	16.5	21.0	13.0	16.5	18.5	11.0	14.5	13.0	8.0	10.5
31	---	---	---	19.5	13.5	16.0	18.5	12.0	15.0	---	---	---
MONTH	24.0	9.5	16.0	25.5	11.5	17.0	21.0	9.5	15.0	19.0	6.5	12.5

05409890 NEDERLO CREEK NEAR GAYS MILLS, WI

LOCATION.--LAT 43°21'43", LONG 90°52'44", IN NW 1/4 SEC.8, T.10 N., R.4 W., CRAWFORD COUNTY, HYDROLOGIC UNIT 07070006, ON RIGHT BANK JUST UPSTREAM FROM BRIDGE ON PRIVATE ROAD, 1.2 MI (1.9 KM) UPSTREAM FROM TAINTER CREEK AND 3.4 MI (5.5 KM) NORTH OF GAYS MILLS.

DRAINAGE AREA.--9.61 MI² (24.9 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--OCTOBER 1967 TO CURRENT YEAR.

REVISED RECORD.--WRD WIS. 1970: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 740 FT (230 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR. HYDROLOGIC STUDIES ARE BEING MADE IN THE NEDERLO CREEK BASIN AND ADDITIONAL DATA AT UPSTREAM SITES ARE AVAILABLE.

AVERAGE DISCHARGE.--9 YEARS, 4.95 FT³/S (0.140 M³/S), 7.00 IN/YR (178 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 2,600 FT³/S (73.6 M³/S) JUNE 23, 1968, GAGE HEIGHT, 17.06 FT (5.200 M) FROM RATING CURVE EXTENDED ABOVE 20 FT³/S (0.57 M³/S) ON BASIS OF SLOPE-AREA MEASUREMENT AT SITE 1.2 MI (1.9 KM) UPSTREAM AT GAGE HEIGHT 17.06 FT (5.200 M), COMPUTATION OF FLOW THROUGH CULVERT AT GAGE HEIGHT 14.80 FT (4.511 M) AND SLOPE-AREA MEASUREMENT MADE AT GAGE HEIGHT 13.36 FT (4.072 M); MINIMUM, 1.7 FT³/S (0.05 M³/S) FEB. 16, 1968, GAGE HEIGHT, 10.78 FT (3.286 M), RESULT OF FREEZEUP.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 434 FT³/S (12.3 M³/S) MAR. 12, GAGE HEIGHT, 14.47 FT (4.410 M); MINIMUM, 3.9 FT³/S (0.110 M³/S) FEB. 1, GAGE HEIGHT, 10.76 FT (3.280 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).

OCT. 1 TO FEB. 26 AND JUNE 15 TO SEPT. 30				FEB. 27 TO JUNE 14			
10.7	3.4	11.1	10	10.7	4.1	11.3	19
10.8	4.2	11.2	14	10.8	5.1	11.4	25
10.9	5.3	11.3	19	10.9	6.3	11.5	32
11.0	7.5	11.4	25	11.0	8.0	11.8	55
				11.1	10	12.2	89
				11.2	14	12.8	150

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	4.5	4.9	4.4	4.3	5.3	5.9	5.8	5.0	4.3	4.3	4.1
2	4.6	4.5	4.8	4.5	4.3	5.3	5.7	5.8	4.9	4.3	4.3	4.1
3	4.6	4.3	4.6	4.4	4.3	5.2	5.8	5.7	4.9	4.3	4.3	4.1
4	4.6	4.5	4.6	4.3	4.2	5.3	5.7	5.6	4.8	4.3	4.3	4.1
5	4.6	4.5	4.8	4.4	4.2	5.2	5.6	5.7	4.8	4.2	4.5	4.1
6	4.6	4.6	4.5	4.4	4.2	5.1	5.6	5.6	4.8	4.2	4.3	4.2
7	4.4	4.6	4.5	4.3	4.2	5.2	5.5	5.5	4.8	4.3	4.2	4.2
8	4.6	4.6	4.6	4.3	4.3	5.1	5.3	5.5	4.8	4.2	4.2	4.3
9	4.6	4.9	4.6	4.3	4.3	5.3	5.3	5.5	4.8	4.2	4.2	4.3
10	4.6	4.9	4.6	4.3	5.5	7.7	6.8	5.5	4.8	4.2	4.2	4.4
11	4.6	4.6	4.6	4.3	5.5	23	5.9	5.3	4.8	4.2	4.2	4.4
12	4.6	4.6	4.5	4.3	18	148	5.6	5.3	4.8	4.2	4.2	4.3
13	4.6	4.6	4.8	4.3	6.0	6.8	5.6	5.6	5.0	4.3	4.2	4.3
14	4.6	4.5	5.2	4.3	4.4	6.2	5.6	5.5	5.0	4.2	4.3	4.4
15	4.6	4.6	4.6	4.4	25	5.7	6.2	6.2	4.5	4.2	4.2	4.3
16	4.6	4.6	4.6	4.3	4.8	5.5	5.7	8.5	4.5	4.2	4.2	4.3
17	4.6	4.5	4.4	4.3	4.8	5.5	6.8	6.2	4.4	4.3	4.2	4.4
18	4.6	4.5	4.4	4.3	4.9	13	9.4	5.7	4.5	4.2	4.2	4.4
19	4.6	4.5	4.5	4.3	4.8	11	6.2	5.6	4.4	4.5	4.2	4.6
20	4.5	4.8	4.5	4.3	4.8	6.3	11	5.5	4.4	4.5	4.2	4.3
21	4.5	4.9	4.4	4.3	5.0	5.6	11	5.3	4.3	4.4	4.2	4.3
22	4.6	4.5	4.4	4.3	4.5	5.3	7.0	5.3	4.4	4.4	4.2	4.2
23	4.6	4.5	4.4	4.4	4.5	5.3	6.6	5.3	4.4	4.4	4.2	4.2
24	4.6	4.6	4.4	4.4	4.9	5.5	8.7	5.3	4.5	4.3	4.1	4.1
25	4.5	4.5	4.5	4.4	5.3	5.5	9.0	5.1	4.4	4.3	4.2	4.1
26	4.5	4.5	4.5	4.3	20	5.8	6.3	5.0	4.3	4.4	4.2	4.2
27	4.6	4.6	4.4	4.3	75	5.7	6.1	5.0	4.2	4.4	4.2	4.0
28	4.5	4.5	4.4	4.4	22	5.5	5.9	5.0	4.2	5.0	4.1	4.2
29	4.5	10	4.4	4.4	6.8	6.6	5.8	5.0	4.5	4.4	4.1	4.2
30	4.5	6.0	4.5	4.4	---	8.5	5.9	5.1	4.4	5.5	4.1	4.2
31	4.5	---	4.5	4.3	---	6.3	---	5.1	---	4.9	4.1	---
TOTAL	141.6	144.3	141.4	134.6	274.8	351.3	197.5	172.1	138.3	135.7	130.6	127.3
MEAN	4.57	4.81	4.56	4.34	9.48	11.3	6.58	5.55	4.61	4.38	4.21	4.24
MAX	4.6	10	5.2	4.5	75	148	11	8.5	5.0	5.5	4.5	4.6
MIN	4.4	4.3	4.4	4.3	4.2	5.1	5.3	5.0	4.2	4.2	4.1	4.0
CFSM	.48	.50	.47	.45	.99	1.18	.68	.58	.48	.46	.44	.44
IN.	.55	.56	.55	.52	1.06	1.36	.76	.67	.54	.53	.51	.49
CAL YR 1975 TOTAL	2052.5		MEAN 5.62	MAX 80	MIN 4.2	CFSM .58	IN 7.94					
WTR YR 1976 TOTAL	2089.5		MEAN 5.71	MAX 148	MIN 4.0	CFSM .59	IN 8.09					

WISCONSIN RIVER BASIN
05409890 NEDERLO CREEK NEAR GAYS MILLS, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1968 TO CURRENT YEAR.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
NOV , 1975												
04...	0845	4.5	520	10.0	10.6	98	27.0	29.0	.20	9.1	--	--
DEC												
16...	0925	4.8	500	3.0	12.4	96	16.0	21.0	.00	14	--	--
JAN , 1976												
27...	1220	4.2	--	.0	13.5	97	130	140	.00	33	20	.23
MAR												
02...	0920	5.2	500	2.5	12.6	97	16.0	17.0	.10	10	4	.06
APR												
06...	0820	5.7	510	6.5	13.4	114	58.0	65.0	.00	53	6	.09
MAY												
04...	1025	5.7	510	6.0	13.4	119	70.2	74.2	.00	59	22	.34
JUN												
17...	1010	4.8	510	15.0	--	--	.231	9.85	.00	4.9	2	.03
JUL												
20...	1400	4.9	510	16.5	11.1	118	57.2	63.5	1.9	58	6	.08
AUG												
24...	0950	4.2	520	13.5	--	--	86.4	101	.87	65	17	.19
SEP												
28...	0825	4.2	510	7.5	--	--	133	141	.95	56	8	.09

05409890 NEDERLO CREEK NEAR BAYS MILLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Nov. 4, 1975	0845	CHRY SOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	260	18	
		<i>Cocconeis</i>	78	5	
		<i>Cymatopleura</i>		0	
		<i>Cymbella</i>	52	4	
		<i>Diatoma</i>	26	2	
		<i>Gomphonema</i>	52	4	
		<i>Melosira</i>		0	
		<i>Navicula</i>	410	29	
		<i>Nitzschia</i>	490	34	
		<i>Pinnularia</i>		0	
		<i>Surirella</i>	78	5	
		TOTAL	1,400		
Dec. 16, 1975	0925	CHRY SOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	42	11	
		<i>Cocconeis</i>	21	6	
		<i>Cymatopleura</i>	10	3	
		<i>Cymbella</i>	21	6	
		<i>Diatoma</i>	10	3	
		<i>Gomphonema</i>	31	8	
		<i>Navicula</i>	120	33	
		<i>Neidium</i>		0	
		<i>Nitzschia</i>	52	14	
		<i>Stauroneis</i>	10	3	
		<i>Surirella</i>	31	8	
		<i>Synedra</i>	10	3	
		EUGLENOPHYTA			
		Cryptophyceae			
		<i>Cryptomonas</i>	10	3	
TOTAL	370				
Jan. 27, 1976	1220	CHRY SOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	40	9	
		<i>Caloneis</i>		0	
		<i>Cocconeis</i>		0	
		<i>Cymatopleura</i>		0	
		<i>Cymbella</i>		0	
		<i>Diatoma</i>		0	
		<i>Gomphonema</i>	60	14	
		<i>Melosira</i>		0	
		<i>Navicula</i>	99	23	
		<i>Nitzschia</i>	180	41	
		<i>Rhicosphenia</i>		0	
		<i>Surirella</i>	60	14	
		<i>Synedra</i>		0	
		TOTAL	440		
		Mar. 2, 1976	0920	CHLOROPHYTA				Grab sample
Chlorophyceae					
<i>Mougeotia</i>				0	
CHRY SOPHYTA					
Bacillariophyceae					
<i>Achnanthes</i>	36			21	
<i>Cocconeis</i>				0	
<i>Cymatopleura</i>				0	
<i>Cymbella</i>				0	
<i>Gomphonema</i>	36			21	
<i>Navicula</i>	49			29	
<i>Nitzschia</i>	36			21	
<i>Surirella</i>				0	
<i>Synedra</i>		0			
EUGLENOPHYTA					
Cryptophyceae					
<i>Cryptomonas</i>	12	7			
TOTAL	170				
Apr. 6, 1976	0820	CHRY SOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	62	10	
		<i>Cocconeis</i>		0	
		<i>Gomphonema</i>	93	15	
		<i>Navicula</i>	93	15	
		<i>Nitzschia</i>	110	17	
		<i>Surirella</i>	250	40	
		<i>Synedra</i>		0	
		CYANOPHYTA			
		Myxophyceae			
		<i>Oscillatoria</i>		0	
		EUGLENOPHYTA			
		Euglenophyceae			
<i>Euglena</i>	16	2			
TOTAL	620				

WISCONSIN RIVER BASIN

05409890 NEDERLO CREEK NEAR GAYS MILLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method	
May 4, 1976	1025	CHRYSOPHYTA				
		Bacillariophyceae			Grab sample	
		<i>Achnanthes</i>	140	25		
		<i>Caloneis</i>		0		
		<i>Cyclotella</i>	20	4		
		<i>Cymatopleura</i>		0		
		<i>Cymbella</i>		0		
		<i>Diatoma</i>		0		
		<i>Gomphonema</i>		0		
		<i>Navicula</i>	140	25		
		<i>Nitzschia</i>	200	36		
		<i>Surirella</i>	41	7		
		<i>Synedra</i>	20	4		
		EUGLENOPHYTA				
Euglenophyceae						
<i>Euglena</i>		0				
TOTAL	570					
June 17, 1976	1010	CHRYSOPHYTA			Grab sample	
		Bacillariophyceae				
		<i>Cymbella</i>	130	12		
		<i>Navicula</i>	350	31		
		<i>Nitzschia</i>	660	58		
		CYANOPHYTA				
		Myxophyceae				
		<i>Oscillatoria</i>		0		
		EUGLENOPHYTA				
		Euglenophyceae				
<i>Euglena</i>		0				
TOTAL	1,100					
July 20, 1976	1400	CHRYSOPHYTA			Grab sample	
		Bacillariophyceae				
		<i>Achnanthes</i>		0		
		<i>Cocconeis</i>		0		
		<i>Gomphonema</i>		0		
		<i>Navicula</i>	760	65		
		<i>Nitzschia</i>	360	31		
		<i>Surirella</i>	45	4		
		<i>Synedra</i>		0		
		TOTAL	1,200			
Aug. 24, 1976	0950	CHRYSOPHYTA			Grab sample	
		Bacillariophyceae				
		<i>Cymbella</i>	110	13		
		<i>Navicula</i>	630	80		
		<i>Synedra</i>	53	7		
TOTAL	790					
Sept. 28, 1976	0825	CHRYSOPHYTA			Grab sample	
		Bacillariophyceae				
		<i>Cymbella</i>	47	10		
		<i>Gomphonema</i>	24	5		
		<i>Navicula</i>	400	81		
		<i>Pinnularia</i>	24	5		
		TOTAL	490			

05409890 NEDERLO CREEK NEAR GAYS MILLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PERIPHYTON

Date	Length of exposure (days)	Organism	Sampling method			
Nov. 4, 1975	39	CHLOROPHYTA	Polyethylene strip			
		Chlorophyceae				
		<i>Oedogonium</i>		P		
		<i>Stigeoclonium</i>		P		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Achnanthes</i>		E		
		<i>Cocconeis</i>		P		
		<i>Cymatopleura</i>		P		
		<i>Cymbella</i>		P		
		<i>Diatoma</i>		P		
		<i>Fragilaria</i>		P		
		<i>Gomphonema</i>		P		
		<i>Melosira</i>		P		
		<i>Navicula</i>		E		
		<i>Nitzschia</i>		P		
		<i>Surirella</i>		P		
		<i>Synedra</i>		P		
		CYANOPHYTA				
		Myxophyceae				
		<i>Oscillatoria</i>		P		
Dec. 16, 1975	41	CHLOROPHYTA	Polyethylene strip			
		Chlorophyceae				
		<i>Oedogonium</i>		P		
		<i>Ulothrix</i>		P		
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Achnanthes</i>		P		
		<i>Cocconeis</i>		P		
		<i>Cymatopleura</i>		P		
		<i>Cymbella</i>		P		
		<i>Diatoma</i>		P		
		<i>Gomphonema</i>		P		
		<i>Melosira</i>		P		
		<i>Nitzschia</i>		P		
		<i>Surirella</i>		P		
		<i>Synedra</i>		P		
		CYANOPHYTA				
		Myxophyceae				
		<i>Oscillatoria</i>		P		
		Jan. 27, 1976		42	CHRYSOPHYTA	Polyethylene strip
					Bacillariophyceae	
<i>Achnanthes</i>	P					
<i>Cymatopleura</i>	P					
<i>Cymbella</i>	P					
<i>Diatoma</i>	P					
<i>Fragilaria</i>	P					
<i>Gomphonema</i>	P					
<i>Meridion</i>	P					
<i>Navicula</i>	E					
<i>Nitzschia</i>	P					
<i>Surirella</i>	P					
<i>Synedra</i>	P					
Mar. 2, 1976	35		CHLOROPHYTA		Polyethylene strip	
			Chlorophyceae			
		<i>Stigeoclonium</i>	P			
		CHRYSOPHYTA				
		Bacillariophyceae				
		<i>Achnanthes</i>	P			
		<i>Amphora</i>	P			
		<i>Cocconeis</i>	P			
		<i>Cymatopleura</i>	P			
		<i>Cymbella</i>	P			
		<i>Diatoma</i>	P			
		<i>Gomphonema</i>	P			
		<i>Melosira</i>	P			
		<i>Meridion</i>	P			
		<i>Navicula</i>	E			
<i>Nitzschia</i>	P					
<i>Pinnularia</i>	P					
<i>Rhoicosphenia</i>	P					
<i>Surirella</i>	P					
<i>Synedra</i>	P					
CYANOPHYTA						
Myxophyceae						
<i>Lyngbya</i>	P					
<i>Oscillatoria</i>	P					
EUGLENOPHYTA						
Euglenophyceae						
<i>Euglena</i>	P					
<i>Trachelomonas</i>	P					

P Present
E Estimated dominant

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976
PERIPHYTON

Date	Length of exposure (days)	Organism	Sampling method	
Apr. 6, 1976	35	CHLOROPHYTA	Polyethylene strip	
		Chlorophyceae		
		<i>Stigeoclonium</i>		P
		<i>Ulothrix</i>		P
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Achnanthes</i>		E
		<i>Cymatopleura</i>		P
		<i>Cymbella</i>		P
		<i>Fragilaria</i>		P
		<i>Gomphonema</i>		E
		<i>Navicula</i>		P
		<i>Nitzschia</i>		P
		<i>Surirella</i>		P
		<i>Synedra</i>		P
		CYANOPHYTA		
		Myxophyceae		
		<i>Lyngbya</i>		P
		<i>Oscillatoria</i>		P
		EUGLENOPHYTA		
		Euglenophyceae		
<i>Phacus</i>	P			
May 4, 1976	30	CHLOROPHYTA	Polyethylene strip	
		Chlorophyceae		
		<i>Stigeoclonium</i>		P
		<i>Ulothrix</i>		E
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Achnanthes</i>		E
		<i>Cocconeis</i>		P
		<i>Cymatopleura</i>		P
		<i>Cymbella</i>		P
		<i>Diatoma</i>		P
		<i>Fragilaria</i>		P
		<i>Gomphonema</i>		P
		<i>Nelosira</i>		P
		<i>Meridion</i>		P
		<i>Navicula</i>		E
		<i>Nitzschia</i>		P
		<i>Pinnularia</i>		P
		<i>Surirella</i>		P
		<i>Synedra</i>		P
		CYANOPHYTA		
Myxophyceae				
<i>Agmenellum</i>	P			
<i>Lyngbya</i>	P			
<i>Oscillatoria</i>	P			
June 17, 1976	44	CHLOROPHYTA		
		Chlorophyceae		
		<i>Cladophora</i>		P
		<i>Oedogonium</i>		P
		<i>Stigeoclonium</i>		P
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Achnanthes</i>		E
		<i>Cocconeis</i>		P
		<i>Cymatopleura</i>		P
		<i>Cymbella</i>		P
		<i>Diatoma</i>		P
		<i>Fragilaria</i>		P
		<i>Gomphonema</i>		P
		<i>Nelosira</i>		P
		<i>Navicula</i>		E
		<i>Nitzschia</i>		P
		<i>Surirella</i>		P
		<i>Synedra</i>		P
		CYANOPHYTA		
		Myxophyceae		
<i>Lyngbya</i>	P			

P Present
E Estimated dominant

05409890 NEDERLO CREEK NEAR GAYS MILLS, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1975 TO SEPTEMBER 1976

PERIPHYTON

Date	Length of exposure (days)	Organism	Sampling method	
July 20, 1976	33	CHLOROPHYTA	Polyethylene strip	
		Chlorophyceae		
		<i>Oedogonium</i>		P
		<i>Spirogyra</i>		P
		<i>Stigeoclonium</i>		P
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Achnanthes</i>		E
		<i>Amphora</i>		P
		<i>Cocconeis</i>		P
		<i>Cymatopleura</i>		P
		<i>Cymbella</i>		P
		<i>Diatoma</i>		P
		<i>Gomphonema</i>		P
		<i>Melosira</i>		P
		<i>Navicula</i>		E
		<i>Neidium</i>		P
		<i>Nitzschia</i>		P
		<i>Surirella</i>		P
		<i>Synedra</i>		P
		CYANOPHYTA		
		Myxophyceae		
		<i>Lyngbya</i>		P
<i>Oscillatoria</i>	P			
Aug. 24, 1976	35	CHLOROPHYTA	Polyethylene strip	
		Chlorophyceae		
		<i>Cosmarium</i>		P
		<i>Oedogonium</i>		P
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Achnanthes</i>		E
		<i>Anomooneis</i>		P
		<i>Cocconeis</i>		P
		<i>Cymatopleura</i>		P
		<i>Cymbella</i>		P
		<i>Diatoma</i>		P
		<i>Gomphonema</i>		P
		<i>Melosira</i>		P
		<i>Navicula</i>		E
		<i>Nitzschia</i>		P
		<i>Stauroneis</i>		P
		<i>Surirella</i>		P
		<i>Synedra</i>		P
		CYANOPHYTA		
		Myxophyceae		
		<i>Anacystis</i>		P
		<i>Lyngbya</i>		P
<i>Oscillatoria</i>	P			
EUGLENOPHYTA				
Euglenophyceae				
<i>Euglena</i>	P			
Sept. 28, 1976	35	CHLOROPHYTA	Polyethylene strip	
		Chlorophyceae		
		<i>Cladophora</i>		P
		<i>Oedogonium</i>		P
		<i>Spirogyra</i>		P
		<i>Stigeoclonium</i>		P
		CHRYSOPHYTA		
		Bacillariophyceae		
		<i>Achnanthes</i>		E
		<i>Cocconeis</i>		P
		<i>Cymatopleura</i>		P
		<i>Cymbella</i>		P
		<i>Diatoma</i>		P
		<i>Fragilaria</i>		P
		<i>Gomphonema</i>		P
		<i>Melosira</i>		P
		<i>Navicula</i>		E
		<i>Neidium</i>		P
		<i>Nitzschia</i>		P
		<i>Rhoicosphenia</i>		P
		<i>Synedra</i>		P
		CYANOPHYTA		
		Myxophyceae		
<i>Lyngbya</i>	P			
<i>Oscillatoria</i>	P			

P Present
E Estimated dominant

WISCONSIN RIVER BASIN

05410000 KICKAPOO RIVER AT GAYS MILLS, WI

LOCATION.--LAT 43°19'10", LONG 90°51'08", IN NE 1/4 SEC.28, T.10 N., R.4 W., CRAWFORD COUNTY, HYDROLOGIC UNIT 07070006, ON UPSTREAM SIDE OF BRIDGE ON STATE HIGHWAY 171, 300 FT (91 M) DOWNSTREAM FROM DAM IN GAYS MILLS AND 3.3 MI (5.3 KM) DOWNSTREAM FROM TAINTOR CREEK.

DRAINAGE AREA.--616 MI² (1,595 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--DECEMBER 1913 TO SEPTEMBER 1934. MONTHLY DISCHARGE ONLY JULY TO SEPTEMBER 1934, PUBLISHED IN WSP 1308. APRIL 1964 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1438: 1915-16(M), 1917, 1918-19(M), 1920-23, 1924-26(M), 1927-30, 1931(M), 1932, 1933-34(M).

GAGE.--NONRECORDING GAGE. DATUM OF GAGE IS 685.75 FT (209.017 M) ABOVE MEAN SEA LEVEL.

REMARKS.--RECORDS FAIR. OCCASIONAL REGULATION CAUSED BY DAM 300 FT (91 M) UPSTREAM.

AVERAGE DISCHARGE.--32 YEARS (1914-34, 1964-76), 426 FT³/S (12.06 M³/S), 9.39 IN/YR (238 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 10,600 FT³/S (300 M³/S) FEB. 10, 1966, GAGE HEIGHT, 16.00 FT (4.877 M); MINIMUM OBSERVED, 48 FT³/S (1.36 M³/S) JULY 27, 1931, GAGE HEIGHT, 0.51 FT (0.155 M).

EXTREMES OUTSIDE OF PERIOD OF RECORD.--FLOOD IN 1913 REACHED A STAGE OF 15.2 FT (4.63 M) FROM FLOODMARK (BACKWATER FROM ICE PROBABLE). FLOOD IN 1961 REACHED A STAGE OF 16.37 FT (4.990 M) FROM FLOODMARK.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 2,370 FT³/S (67.1 M³/S) MAR. 14, GAGE HEIGHT, 12.37 FT (3.770 M); MINIMUM DAILY, 253 FT³/S (7.16 M³/S) SEPT. 15-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	337	332	660	310	280	1200	1220	631	389	350	360	257
2	338	332	600	300	280	644	1140	631	383	340	330	260
3	334	334	440	290	280	510	802	599	377	330	310	257
4	332	330	390	260	280	474	694	573	360	310	300	260
5	330	334	380	280	280	459	620	541	358	310	300	260
6	332	328	390	290	280	434	584	520	358	300	300	260
7	332	330	380	300	280	423	552	500	352	300	296	262
8	332	327	370	290	290	412	525	479	342	310	307	260
9	335	380	360	290	300	401	501	474	341	310	304	256
10	332	410	360	290	320	412	481	461	335	300	299	255
11	332	470	360	290	340	664	552	450	335	290	299	255
12	334	420	350	290	380	1600	534	444	334	290	293	255
13	331	370	350	300	500	1910	505	436	340	280	291	258
14	335	360	360	300	700	2290	476	444	360	280	283	258
15	335	350	380	290	900	1940	490	500	370	280	288	253
16	330	340	410	290	1040	1220	532	560	358	290	280	253
17	324	340	360	280	935	750	572	620	334	310	278	253
18	320	340	320	280	674	636	706	644	335	320	274	255
19	325	340	350	290	508	921	921	530	335	300	280	270
20	327	340	380	290	410	1280	1030	476	332	290	273	280
21	331	350	380	280	396	1330	1100	450	330	300	269	290
22	331	370	360	280	388	1410	1200	430	321	320	270	290
23	325	390	350	280	377	1170	1200	412	321	320	265	280
24	323	360	350	280	370	660	1210	417	322	310	267	270
25	327	340	340	280	397	590	1250	401	332	300	267	267
26	325	330	330	280	493	595	1300	399	331	290	290	262
27	331	320	320	280	882	704	1290	402	331	280	300	261
28	331	340	320	290	1440	860	919	396	320	290	290	267
29	338	352	310	290	1520	800	762	383	314	320	280	269
30	334	486	310	290	---	764	688	383	331	350	270	269
31	334	---	310	280	---	1120	---	386	---	380	260	---
TOTAL	10257	10745	11630	8910	15520	28583	24356	14972	10281	9550	8973	7902
MEAN	331	358	375	287	535	922	812	483	343	308	289	263
MAX	338	486	660	310	1520	2290	1300	644	389	380	360	290
MIN	320	320	310	260	280	401	476	383	314	280	260	253
CFSM	.54	.58	.61	.47	.87	1.50	1.32	.78	.56	.50	.47	.43
IN.	.62	.65	.70	.54	.94	1.73	1.47	.90	.62	.58	.54	.48
CAL YR 1975 TOTAL	157517		MEAN 432	MAX 2230	MIN 280	CFSM .70	IN 9.51					
WTR YR 1976 TOTAL	161679		MEAN 442	MAX 2290	MIN 253	CFSM .72	IN 9.76					

05410500 KICKAPOO RIVER AT STEUBEN, WI

LOCATION.--LAT 43°11'27", LONG 90°52'28", IN NW 1/4 SEC.8, T.8 N., R.4 W., CRAWFORD COUNTY, HYDROLOGIC UNIT 07070006, ON RIGHT BANK 0.8 MI (1.3 KM) UPSTREAM FROM DUFFY CREEK, 1.0 MI (1.6 KM) NORTHWEST OF STEUBEN, AND 14 MI (23 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--690 MI² (1,790 KM²).

PERIOD OF RECORD.--MAY 1933 TO CURRENT YEAR.

REVISED RECORDS.--WSP 855: DRAINAGE AREA. WSP 1438: 1933-38.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 657.62 FT (200.50 M) ABOVE MEAN SEA LEVEL, ADJUSTMENT OF 1912. PRIOR TO OCT. 20, 1938, NONRECORDING GAGE AT SITE 1.0 MI (1.6 KM) UPSTREAM AT DATUM 1.3 FT (0.4 M) HIGHER.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIOD, WHICH ARE FAIR.

AVERAGE DISCHARGE.--43 YEARS, 465 FT³/S (13.17 M³/S), 9.15 IN/YR (232 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 10,800 FT³/S (306 M³/S) MAR. 28, 1961, GAGE HEIGHT, 12.33 FT (3.758 M); MINIMUM OBSERVED, 161 FT³/S (4.56 M³/S) AUG. 9, 1936, GAGE HEIGHT, 0.76 FT (0.232 M) SITE AND DATUM THEN IN USE.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 2,100 FT³/S (59.5 M³/S) MAR. 15, GAGE HEIGHT, 9.21 FT (2.807 M), NO OTHER PEAK ABOVE BASE OF 1,900 FT³/S (53.8 M³/S); MINIMUM DAILY, 297 FT³/S (8.41 M³/S) SEPT. 10.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 6-8, DEC. 19 TO FEB. 15.)

2.9	289	7.0	1,000
3.4	360	8.0	1,250
4.0	450	8.5	1,440
5.0	600	9.0	2,080
6.0	780		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	450	421	686	380	360	1430	1100	733	494	413	415	305
2	450	424	726	370	350	1160	1150	701	504	414	390	312
3	435	433	550	340	350	688	1020	674	478	388	364	317
4	427	430	505	320	350	592	795	644	457	375	347	314
5	426	426	492	350	350	572	707	621	446	369	349	309
6	427	425	490	380	360	523	651	603	438	365	354	306
7	426	425	480	400	360	498	613	589	433	361	355	304
8	426	427	470	390	370	508	585	570	428	361	351	303
9	430	434	458	380	380	507	560	556	424	364	340	300
10	431	472	466	380	390	521	540	546	421	360	335	297
11	432	509	462	380	410	599	550	538	420	351	336	300
12	432	559	456	380	430	1220	579	526	417	343	338	300
13	431	492	453	390	480	1510	557	522	423	340	340	302
14	434	458	467	390	560	1800	533	526	436	338	345	306
15	437	449	488	380	660	2070	582	533	443	337	339	303
16	435	442	530	380	1060	2020	614	568	440	344	347	306
17	431	439	509	370	1050	1430	606	661	424	370	337	310
18	427	437	401	370	971	830	727	725	413	366	329	310
19	429	433	410	380	675	818	892	636	411	346	326	317
20	429	435	450	380	604	1050	988	574	408	350	322	334
21	430	451	440	370	570	1160	1080	547	404	364	317	344
22	432	463	420	370	533	1220	1130	528	397	389	313	342
23	432	482	410	360	498	1280	1180	512	392	377	310	332
24	435	466	400	360	467	1070	1230	503	392	363	307	324
25	440	449	390	360	486	707	1270	497	402	349	306	321
26	443	416	390	370	568	644	1270	489	405	341	329	325
27	446	406	380	370	901	733	1270	484	404	337	343	325
28	437	430	380	360	1330	963	1230	478	396	351	332	330
29	427	457	380	360	1390	889	943	475	386	372	316	331
30	422	578	380	360	---	802	791	479	391	381	308	330
31	419	---	380	360	---	967	---	488	---	439	305	---
TOTAL	13408	13568	14299	11490	17263	30781	25743	17526	12727	11318	10445	9459
MEAN	433	452	461	371	595	993	858	565	424	365	337	315
MAX	450	578	726	400	1390	2070	1270	733	504	439	415	344
MIN	419	406	380	320	350	498	533	475	386	337	305	297
CFSM	.63	.66	.67	.54	.86	1.44	1.24	.82	.61	.53	.49	.46
IN.	.72	.73	.77	.62	.93	1.66	1.39	.94	.69	.61	.56	.51
CAL YR 1975 TOTAL	198455		MEAN 544	MAX 2740	MIN 370	CFSM .79	IN 10.70					
WTR YR 1976 TOTAL	188027		MEAN 514	MAX 2070	MIN 297	CFSM .74	IN 10.14					

WISCONSIN RIVER BASIN
RESERVOIRS IN WISCONSIN RIVER BASIN

THE 24 RESERVOIRS LISTED BELOW ARE USED TO STABILIZE THE FLOW OF THE WISCONSIN AND TOMAHAWK RIVERS FOR POWER UTILIZATION AND ARE ALSO USED FOR RECREATIONAL PURPOSES. THE FIRST 21 RESERVOIRS ARE OWNED AND OPERATED BY THE WISCONSIN VALLEY IMPROVEMENT CO., WHICH FURNISHES THE GAGE HEIGHTS AND CAPACITY TABLES. REVISED CAPACITY TABLES FOR ALL 21 RESERVOIRS WERE RECEIVED FROM THE COMPANY IN APRIL 1957 AND WERE USED TO COMPUTE MONTH-END USABLE CONTENTS BEGINNING SEPT. 30, 1955. ANOTHER REVISED CAPACITY TABLE FOR BURNT ROLLWAYS RESERVOIR WAS USED TO COMPUTE MONTH-END USABLE CONTENTS BEGINNING SEPT. 30, 1964. LAKE DUBAY IS OWNED BY THE CONSOLIDATED WATER POWER CO. PETENWELL AND CASTLE ROCK ARE OWNED AND OPERATED BY THE WISCONSIN RIVER POWER CO., WHICH FURNISHED THE GAGE HEIGHTS AND CAPACITY TABLES FOR THOSE TWO RESERVOIRS. MONTH-END CONTENTS ARE COMPUTED BY THE U.S. GEOLOGICAL SURVEY. THE USABLE CAPACITY OF THESE RESERVOIRS IS USUALLY LESS IN SUMMER THAN IN WINTER BECAUSE THE ALLOWABLE SUMMER DRAWDOWN IS LIMITED BY THE DEPARTMENT OF NATURAL RESOURCES IN THE INTEREST OF RIPARIAN PROPERTY OWNERS. THERE ARE OCCASIONALLY FORMAL OR INFORMAL CHANGES IN CAPACITY AND IN MINIMUM DRAWDOWN LEVELS. USABLE CAPACITY FIGURES LISTED BELOW ARE FOR WINTER REGULATION.

- 05390100 LAC VIEUX DESERT ON WISCONSIN RIVER, LAT 46°07'18", LONG 89°09'07", IN SE 1/4 NW 1/4 SEC.17, T.42 N., R.11 E., VILAS COUNTY, 4.8 MI (7.7 KM) NORTHWEST OF PHELPS, WIS., USED AS A RESERVOIR SINCE 1908, HAS A USABLE CAPACITY OF 652,000,000 FT³ (18,500,000 M³). DRAINAGE AREA, 28 MI² (72 KM²). DATUM OF GAGE IS 1,679.53 FT (511.42 M) ABOVE MEAN SEA LEVEL.
- 05390150 TWIN LAKES ON TWIN RIVER, LAT 46°01'20", LONG 89°10'05", IN SW 1/4 NE 1/4 SEC.19, T.41 N., R.11 E., VILAS COUNTY, 5.0 MI (8.0 KM) SOUTHWEST OF PHELPS, WIS., USED AS A RESERVOIR SINCE 1908, HAS A USABLE CAPACITY OF 313,000,000 FT³ (8,860,000 M³). DRAINAGE AREA, 26 MI² (67 KM²). ALTITUDE OF GAGE IS 1,640 FT (500 M), FROM RIVER-PROFILE MAP.
- 05390200 BUCKATABON LAKES ON BUCKATABON CREEK, LAT 46°01'18", LONG 89°18'40", IN SE 1/4 NE 1/4 SEC.24, T.41 N., R.9 E., VILAS COUNTY, 3.3 MI (5.3 KM) SOUTHWEST OF CONOVER, WIS., USED AS A RESERVOIR SINCE 1908, HAS A USABLE CAPACITY OF 130,000,000 FT³ (3,680,000 M³). DRAINAGE AREA, 14 MI² (36 KM²). DATUM OF GAGE IS 1,637.85 FT (499.22 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN VALLEY IMPROVEMENT CO.).
- 05390250 SEVENMILE LAKE ON SEVENMILE CREEK, LAT 45°52'30", LONG 89°04'07", IN SE 1/4 NE 1/4 SEC.11, T.39 N., R.11 E., ONEIDA COUNTY, 9.1 MI (14.6 KM) SOUTHWEST OF TOWN OF EAGLE RIVER, WIS., USED AS A RESERVOIR SINCE 1908, HAS A USABLE CAPACITY OF 93,000,000 FT³ (2,630,000 M³). DRAINAGE AREA, 14 MI² (36 KM²). DATUM OF GAGE IS 1,646.30 FT (501.79 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN VALLEY IMPROVEMENT CO.).
- 05390300 LOWER NINEMILE LAKE ON NINEMILE CREEK, LAT 45°53'37", LONG 89°07'15", IN NE 1/4 NW 1/4 SEC.4, T.39 N., R.11 E., ONEIDA COUNTY, 6.6 MI (10.6 KM) SOUTHWEST OF TOWN OF EAGLE RIVER, WIS., USED AS A RESERVOIR SINCE 1908, HAS A USABLE CAPACITY OF 121,000,000 FT³ (3,430,000 M³). DRAINAGE AREA, 25 MI² (65 KM²). DATUM OF GAGE IS 1,638.27 FT (499.34 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN VALLEY IMPROVEMENT CO.).
- 05390350 BURNT ROLLWAYS RESERVOIR ON EAGLE RIVER, LAT 45°53'40", LONG 89°08'28", IN NE 1/4 NW 1/4 SEC.5, T.39 N., R.11 E., ONEIDA COUNTY, 5.3 MI (8.5 KM) SOUTHWEST OF TOWN OF EAGLE RIVER, WIS., USED AS A RESERVOIR SINCE 1908, HAS A USABLE CAPACITY OF 779,000,000 FT³ (22,100,000 M³). THIS RESERVOIR INCLUDES 18 LAKES CONTROLLED BY THE SAME DAM. DRAINAGE AREA, 129 MI² (334 KM²). ALTITUDE OF GAGE IS 1,620 FT (494 M), FROM RIVER-PROFILE MAP.
- 05390400 LONG LAKE ON DEERSKIN RIVER, LAT 46°02'37", LONG 89°02'44", IN NW 1/4 SE 1/4 SEC.7, T.41 N., R.12 E., VILAS COUNTY, 2.5 MI (4.0 KM) SOUTHWEST OF PHELPS, WIS., USED AS A RESERVOIR SINCE 1908, HAS A USABLE CAPACITY OF 400,000,000 FT³ (11,300,000 M³). DRAINAGE AREA, 35 MI² (91 KM²). DATUM OF GAGE IS 1,695.14 FT (516.68 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN VALLEY IMPROVEMENT CO.).
- 05390600 DEERSKIN LAKE ON LITTLE DEERSKIN RIVER, LAT 45°59'07", LONG 89°09'40", IN SE 1/4 SEC.31, T.41 N., R.11 E., VILAS COUNTY, 6.3 MI (10.1 KM) NORTHEAST OF TOWN OF EAGLE RIVER, WIS., USED AS A RESERVOIR SINCE 1908, HAS A USABLE CAPACITY OF 22,000,000 FT³ (623,000 M³). DRAINAGE AREA, 5 MI² (13 KM²). DATUM OF GAGE IS 1,640.16 FT (499.92 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN VALLEY IMPROVEMENT CO.).
- 05390650 SUGAR CAMP RESERVOIR ON SUGAR CAMP CREEK, LAT 45°52'19", LONG 89°23'40", IN NE 1/4 SEC.17, T.39 N., R.9 E., ONEIDA COUNTY, 7.6 MI (12.2 KM) SOUTHWEST OF TOWN OF EAGLE RIVER, WIS., USED AS A RESERVOIR SINCE 1908, HAS A USABLE CAPACITY OF 471,000,000 FT³ (13,300,000 M³). DRAINAGE AREA, 59 MI² (153 KM²). DATUM OF GAGE IS 1,591.94 FT (485.22 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN VALLEY IMPROVEMENT CO.).
- 05390700 LITTLE ST. GERMAIN LAKE ON LITTLE ST. GERMAIN CREEK, LAT 45°53'57", LONG 89°27'08", IN SE 1/4 SEC.35, T.40 N., R.8 E., VILAS COUNTY, 9.6 MI (15.4 KM) WEST OF TOWN OF EAGLE RIVER, WIS., USED AS A RESERVOIR SINCE 1908, HAS A USABLE CAPACITY OF 93,000,000 FT³ (2,640,000 M³). DRAINAGE AREA, 19 MI² (49 KM²). DATUM OF GAGE IS 1,611.54 FT (491.20 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN VALLEY IMPROVEMENT CO.).
- 05390750 BIG ST. GERMAIN LAKE ON ST. GERMAIN RIVER, LAT 45°55'06", LONG 89°31'55", IN SE 1/4 SEC.30, T.40 N., R.8 E., VILAS COUNTY, 5.0 MI (8.0 KM) SOUTH OF SAYER, WIS., USED AS A RESERVOIR SINCE 1908, HAS A USABLE CAPACITY OF 202,000,000 FT³ (5,720,000 M³). DRAINAGE AREA, 69 MI² (179 KM²). DATUM OF GAGE IS 1,588.32 FT (484.12 M) ABOVE MEAN SEA LEVEL (LEVELS BY PUBLIC SERVICE COMMISSION OF WISCONSIN).
- 05390800 PICKEREL LAKE ON ST. GERMAIN RIVER, LAT 45°52'22", LONG 89°31'47", IN NE 1/4 SEC.18, T.39 N., R.8 E., ONEIDA COUNTY, 5.0 MI (8.0 KM) NORTHEAST OF TOWN OF LAKE TOMAHAWK, WIS., USED AS A RESERVOIR SINCE 1935, HAS A USABLE CAPACITY OF 338,000,000 FT³ (9,570,000 M³). DRAINAGE AREA, 78 MI² (202 KM²). DATUM OF GAGE IS 1,582.00 FT (482.19 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN VALLEY IMPROVEMENT CO.).
- 05390900 RAINBOW LAKE ON WISCONSIN RIVER, LAT 45°50'02", LONG 89°32'42", IN SW 1/4 SEC.30, T.39 N., R.8 E., ONEIDA COUNTY, 800 FT (244 M) UPSTREAM FROM U.S. GEOLOGICAL SURVEY RIVER GAGING STATION, 2.7 MI (4.3 KM) NORTHEAST OF TOWN OF LAKE TOMAHAWK, WIS., USED AS A RESERVOIR SINCE 1935, HAS A USABLE CAPACITY OF 2,181,000,000 FT³ (61,770,000 M³). DRAINAGE AREA, 740 MI² (1,917 KM²). DATUM OF GAGE IS 1,570.00 FT (478.54 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN VALLEY IMPROVEMENT CO.).
- 05391100 SOUTH PELICAN LAKE ON PELICAN RIVER, LAT 45°31'37", LONG 89°12'24", IN S 1/2 SEC.11, T.35 N., R.10 E., ONEIDA COUNTY, 2.8 MI (4.5 KM) NORTHWEST OF TOWN OF PELICAN LAKE, WIS., USED AS A RESERVOIR SINCE 1909, HAS A USABLE CAPACITY OF 305,000,000 FT³ (8,640,000 M³). DRAINAGE AREA, 22 MI² (57 KM²). DATUM OF GAGE IS 1,589.98 FT (484.63 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN VALLEY IMPROVEMENT CO.).

RESERVOIRS IN WISCONSIN RIVER BASIN--CONTINUED

- 05391300 NORTH PELICAN LAKES (INCLUDES MOEN LAKES) DN NORTH BRANCH PELICAN RIVER, LAT 45°38'05", LONG 89°14'38", IN SE 1/4 SEC.4, T.36 N., R.10 E., ONEIDA COUNTY, 0.2 MI (0.3 KM) BELDW TWIN LAKES CREEK AND 8.0 MI (12.9 KM) EAST OF RHINELANDER, WIS., CITY LIMITS, USED AS A RESERVOIR SINCE 1908, HAS A USABLE CAPACITY OF 218,000,000 FT³ (6,170,000 M³), DRAINAGE AREA 71 MI² (184 KM²), DATUM OF GAGE IS 1,569.10 FT (478.26 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN VALLEY IMPROVEMENT CO.).
- 05392100 MINOCQUA LAKE DN TOMAHAWK RIVER, LAT 45°52'35", LONG 89°43'38", ON LINE BETWEEN SECS.10 AND 15, T.39 N., R.6 E., ONEIDA COUNTY, 1.0 MI (1.6 KM) WEST OF MINOCQUA, WIS., USED AS A RESERVOIR SINCE 1910, HAS A USABLE CAPACITY OF 628,000,000 FT³ (17,800,000 M³), DRAINAGE AREA, 89 MI² (231 KM²), DATUM OF GAGE IS 1,584.56 FT (482.97 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN VALLEY IMPROVEMENT CO.).
- 05392200 SQUIRREL LAKE DN SQUIRREL RIVER, LAT 45°50'37", LONG 89°54'13", IN NE 1/4 SEC.30, T.39 N., R.5 E., ONEIDA COUNTY, 0.4 MI (15.1 KM) WEST OF MINOCQUA WIS., USED AS A RESERVOIR SINCE 1908, HAS A USABLE CAPACITY OF 182,000,000 FT³ (5,150,000 M³), DRAINAGE AREA, 17 MI² (44 KM²), DATUM OF GAGE IS 1,560.93 FT (475.77 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN VALLEY IMPROVEMENT CO.).
- 05392300 WILLOW RESERVOIR DN TOMAHAWK RIVER, LAT 45°42'45", LONG 89°50'38", IN NE 1/4 SEC.10, T.37 N., R.5 E., ONEIDA COUNTY, 8.8 MI (14.2 KM) SOUTHWEST OF HAZELHURST, WIS., USED AS A RESERVOIR SINCE 1927, HAS A USABLE CAPACITY OF 3,302,000,000 FT³ (93,510,000 M³), DRAINAGE AREA, 327 MI² (847 KM²), DATUM OF GAGE IS 1,505.87 FT (458.99 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN VALLEY IMPROVEMENT CO.).
- 05392500 LAKE NOKOMIS ON TOMAHAWK RIVER, LAT 45°32'20", LONG 89°44'48", IN NW 1/4 SEC.9, T.35 N., R.6 E., LINCOLN COUNTY, AT U.S. GEOLOGICAL SURVEY RIVER GAGING STATION, 0.5 MI (0.8 KM) EAST OF BRADLEY, WIS., USED AS A RESERVOIR SINCE 1912, HAS A USABLE CAPACITY OF 1,808,000,000 FT³ (51,200,000 M³), DRAINAGE AREA, 548 MI² (1,419 KM²), DATUM OF GAGE IS 1,448.24 FT (441.42 M) ABOVE MEAN SEA LEVEL.
- 05393600 SPIRIT RIVER FLOWAGE ON SPIRIT RIVER, LAT 45°26'18", LONG 89°44'30", IN NE 1/4 SEC.16, T.34 N., R.6 E., LINCOLN COUNTY, 2.0 MI (3.2 KM) SOUTH OF TOMAHAWK, WIS., USED AS A RESERVOIR SINCE 1923, HAS A USABLE CAPACITY OF 756,000,000 FT³ (21,400,000 M³), DRAINAGE AREA, 174 MI² (451 KM²), DATUM OF GAGE IS 1,420.53 FT (432.98 M) ABOVE MEAN SEA LEVEL.
- 05399600 BIG EAU PLEINE RESERVOIR ON BIG EAU PLEINE RIVER LAT 44°43'52", LONG 89°45'35", IN SW 1/4 SEC.14, T.26 N., R.6 E., MARATHON COUNTY, 3.0 MI (4.8 KM) NORTHEAST OF DANCY, WIS., USED AS A RESERVOIR SINCE 1937, HAS A CAPACITY OF 4,457,000,000 FT³ (126,200,000 M³), DRAINAGE AREA, 365 MI² (945 KM²), DATUM OF GAGE IS 1,115.00 FT (339.85 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN VALLEY IMPROVEMENT CO.).
- 05400295 LAKE DUBAY ON WISCONSIN RIVER, LAT 44°39'54", LONG 89°39'03", IN SEC.10, T.25 N., R.7 E., WOOD COUNTY, 1.5 MI (2.4 KM) DOWNSTREAM FROM LITTLE EAU PLEINE RIVER AND 10.5 MI (16.9 KM) NORTHWEST OF STEVENS POINT, HAS A USABLE CAPACITY OF 2,117,000,000 FT³ (59,950,000 M³), DRAINAGE AREA, 4,890 MI² (12,665 KM²), DATUM OF GAGE IS AT SEA LEVEL (POWER COMPANY LEVELS).
- 05401400 PETENWELL FLOWAGE ON WISCONSIN RIVER, LAT 44°03'26", LONG 90°01'18", IN SE 1/4 SEC.4, T.18 N., R.4 E., ADAMS COUNTY, 5.2 MI (8.4 KM) UPSTREAM FROM ROCHE A CRI CREEK, 2.4 MI (3.9 KM) WEST OF STRONGS PRAIRIE, WIS., AND 3.5 MI (5.6 KM) NORTHEAST OF NEEDEDAH, WIS., USED AS A RESERVOIR SINCE 1950, HAS A TOTAL CAPACITY OF 19,880,000,000 FT³ (563,000,000 M³), DRAINAGE AREA, 5,869 MI² (15,201 KM²), DATUM OF GAGE IS 790.2 FT (240.9 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN RIVER POWER CO.).
- 05403200 CASTLE ROCK FLOWAGE ON WISCONSIN RIVER, LAT 43°51'48", LONG 89°57'38", IN SEC.13, T.16 N., R.4 E., ADAMS COUNTY, 4.5 MI (7.2 KM) UPSTREAM FROM DUCK CREEK, AND 2.0 MI (3.2 KM) SOUTH OF GERMANTOWN, WIS., AND 7.0 MI (11.3 KM) NORTHEAST OF MAUSTON, WIS., USED AS A RESERVOIR SINCE 1950, HAS A TOTAL CAPACITY OF 7,630,000,000 FT³ (216,000,000 M³), DRAINAGE AREA, 6,860 MI² (17,767 KM²), DATUM OF GAGE IS 790.2 FT (240.9 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN RIVER POWER CO.).

MONTH-END CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

	LAC VIEUX DESERT	TWIN LAKES	BUCKATABON LAKE	SEVENMILE LAKE	LOWER NINEMILE LAKE	BURNT ROLLWAYS RESERVOIR	LONG LAKE	DEERSKIN LAKE
SEPT. 30.....	315	131	110	78	116	705	163	11
OCT. 31.....	157	86	86	59	85	542	211	4
NOV. 30.....	175	61	68	49	47	584	70	5
DEC. 31.....	108	67	66	15	16	539	91	5
JAN. 31.....	65	20	36	12	1	177	20	5
FEB. 29.....	33	0	16	0	0	0	2	5
MAR. 31.....	92	44	46	16	67	170	99	9
APR. 30.....	285	139	104	62	100	581	226	11
MAY 31.....	291	151	123	63	101	581	227	13
JUNE 30.....	268	142	115	64	103	524	203	14
JULY 31.....	220	108	105	54	78	337	160	12
AUG. 31.....	151	75	98	47	79	290	118	12
SEPT. 30.....	104	20	77	32	49	237	76	10

WISCONSIN RIVER BASIN

RESERVOIRS IN WISCONSIN RIVER BASIN--CONTINUED

MONTH-END CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

	SUGAR CAMP RESERVOIR	LITTLE ST. GERMAIN LAKE	BIG ST. GERMAIN LAKE	PICKEREL LAKE	RAINBOW LAKE	SOUTH PELICAN LAKE	NORTH PELICAN LAKES	MINOCQUA LAKE
SEPT. 30.....	368	71	152	269	689	254	144	516
OCT. 31.....	280	54	121	263	926	249	125	395
NOV. 30.....	331	34	86	234	2,033	258	97	321
DEC. 31.....	376	11	64	229	1,997	178	47	146
JAN. 31.....	263	10	17	166	1,877	106	30	68
FEB. 29.....	43	10	22	157	1,100	69	34	0
MAR. 31.....	167	30	38	151	960	104	101	92
APR. 30.....	460	70	171	267	2,167	267	152	255
MAY 31.....	391	72	152	271	1,975	250	138	332
JUNE 30.....	368	75	161	270	1,306	226	132	556
JULY 31.....	326	66	145	270	674	204	126	326
AUG. 31.....	304	59	131	258	214	155	128	367
SEPT. 30.....	246	45	94	135	129	106	93	304

	SQUIRREL LAKE	WILLOW RESERVOIR	LAKE NOKOMIS	SPIRIT RIVER FLOWAGE	BIG EAU PLEINE RESERVOIR	LAKE DUBAY	PETENWELL FLOWAGE	CASTILE ROCK FLOWAGE
SEPT. 30.....	145	1,082	1,457	559	2,798	3,894	17,606	5,883
OCT. 31.....	126	751	1,295	530	1,898	4,194	17,668	5,658
NOV. 30.....	95	1,813	1,701	718	2,598	4,150	17,720	5,890
DEC. 31.....	56	2,738	1,418	549	3,114	4,150	17,747	5,760
JAN. 31.....	27	2,036	968	342	1,662	4,094	17,280	5,394
FEB. 29.....	28	1,117	791	207	339	4,113	16,192	4,440
MAR. 31.....	86	1,472	799	535	4,280	4,552	17,055	5,549
APR. 30.....	154	3,105	1,779	744	4,388	4,414	18,620	6,578
MAY 31.....	150	2,877	1,646	603	4,334	4,468	18,372	6,167
JUNE 30.....	153	1,694	1,185	353	3,725	4,039	17,659	5,690
JULY 31.....	142	765	1,009	278	2,803	4,188	17,456	5,903
AUG. 31.....	146	476	649	151	1,958	3,963	17,245	5,443
SEPT. 30.....	123	81	355	109	1,571	4,029	17,124	5,425

05413500 GRANT RIVER AT BURTON, WI

LOCATION.--LAT 42°43'13", LONG 90°49'09", IN NW 1/4 SEC.23, T.3 N., R.4 W., GRANT COUNTY, HYDROLOGIC UNIT 0706003, ON RIGHT BANK AT DOWNSTREAM SIDE OF HIGHWAY BRIDGE AT BURTON, 5.9 MI (9.5 KM) NORTHWEST OF POTOSI AND 9.5 MI (15.3 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--269 MI² (697 KM²), REVISED.

PERIOD OF RECORD.--OCTOBER 1934 TO CURRENT YEAR. PUBLISHED AS "NEAR BURTON" OCTOBER 1934 TO SEPTEMBER 1947. RECORDS PUBLISHED FOR BOTH SITES MARCH TO SEPTEMBER 1947. OCTOBER 1934, MONTHLY DISCHARGE ONLY, PUBLISHED IN WSP 130B.

REVISED RECORDS.--WSP 130B: 1935-37(M), 1941(M), 1945-46(M), 1949(M). WSP 172B: 1942(M).

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 606.89 FT (184.980 M) ABOVE MEAN SEA LEVEL, ADJUSTMENT OF 1912. OCT. 17, 1934, TO SEPT. 30, 1974, NONRECORDING GAGE AT SITE 6 MI (10 KM) UPSTREAM AT DATUM 33.18 FT (10.113 M) HIGHER. MAR. 18, 1947, TO JULY 27, 1949, NONRECORDING GAGE AT PRESENT SITE AND DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

COOPERATION.--EIGHT DISCHARGE MEASUREMENTS FURNISHED BY CORPS OF ENGINEERS.

AVERAGE DISCHARGE.--42 YEARS, 167 FT³/S (4.729 M³/S), 8.43 IN/YR (214 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 25,000 FT³/S (708 M³/S) JULY 16, 1950, GAGE HEIGHT, 24.82 FT (7.565 M), FROM RATING CURVE EXTENDED ABOVE 18,000 FT³/S (510 M³/S) ON BASIS OF SLOPE-AREA MEASUREMENT OF PEAK FLOW; MINIMUM, 21 FT³/S (0.59 M³/S) MAR. 4, 1954, RESULT OF FREEZEUP.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 2,400 FT³/S (68.0 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)	DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)
MAR. 12	1530	3540 100	19.32 5.889	JULY 28	0730	*7,000 201	*21.28 6.486

MINIMUM DAILY DISCHARGE, 78 FT³/S (2.21 M³/S) JAN. 3.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(SHIFTING-CONTROL METHOD USED MAR. 1-3, MAR. 14 TO APR. 1, JULY 29 TO AUG. 22; STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 17 TO FEB. 17.)

4.7	75	11.0	88A
5.0	86	13.0	1,120
6.0	156	15.0	1,600
7.0	270	17.0	2,120
9.0	568		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	115	158	90	100	171	183	208	124	100	123	87
2	123	118	145	82	98	150	166	194	122	98	113	87
3	122	134	133	78	96	140	157	182	117	97	109	86
4	122	149	128	82	94	310	150	174	115	96	107	84
5	121	122	128	90	90	1230	145	172	112	95	116	83
6	121	119	128	90	88	372	141	170	111	95	113	83
7	121	119	118	86	88	259	136	160	109	96	105	83
8	121	119	119	82	92	423	132	155	112	96	102	81
9	122	121	120	82	100	525	128	153	111	95	101	80
10	121	153	119	64	120	817	127	149	110	94	101	80
11	120	129	118	90	170	709	140	147	110	92	101	80
12	120	121	116	100	180	2060	132	144	109	91	100	81
13	120	120	115	120	120	505	126	149	118	91	99	80
14	120	117	135	120	110	227	126	159	141	92	139	80
15	121	116	142	120	120	192	135	147	125	92	119	80
16	119	116	117	110	180	176	150	156	111	96	100	80
17	118	116	90	110	130	162	160	168	108	92	99	80
18	118	114	110	110	1120	162	180	145	107	91	101	81
19	118	113	100	110	924	159	210	139	106	90	97	83
20	118	115	100	110	411	162	221	137	105	93	94	90
21	119	123	98	110	469	159	512	140	103	93	93	84
22	120	117	98	110	208	146	330	132	102	90	92	82
23	120	112	98	110	194	144	283	132	102	90	91	82
24	120	113	98	110	245	143	320	129	103	91	91	81
25	130	112	98	110	756	142	475	126	108	88	94	81
26	120	127	96	110	1010	142	340	125	104	87	104	82
27	118	121	96	100	1130	170	283	124	101	89	95	83
28	117	119	96	100	953	153	230	121	101	1880	102	82
29	116	201	96	100	320	154	219	122	101	252	91	82
30	114	582	96	110	---	179	213	141	104	130	88	83
31	114	---	94	110	---	203	---	131	---	171	87	---
TOTAL	3722	4173	3503	3126	9716	10646	6250	4631	3312	4943	3167	2471
MEAN	120	139	113	101	335	343	208	149	110	159	102	82.4
MAX	130	582	158	120	1130	2060	512	208	141	1880	139	90
MIN	114	112	90	78	88	140	126	121	101	87	87	80
CFSM	.45	.52	.42	.38	1.25	1.28	.77	.55	.41	.59	.38	.31
IN.	.51	.58	.48	.43	1.34	1.47	.86	.64	.46	.68	.44	.34
CAL YR 1975 TOTAL	80866		MEAN 222	MAX 5580	MIN 90	CFSM .83	IN 11.18					
WTR YR 1976 TOTAL	59660		MEAN 163	MAX 2060	MIN 78	CFSM .61	IN 8.25					

PLATTE RIVER BASIN

05414000 PLATTE RIVER NEAR ROCKVILLF, WI

LOCATION--LAT 42°43'52", LONG 90°38'25", IN SW 1/4 SEC.17, T.3 N., R.2 W., GRANT COUNTY, HYDROLOGIC UNIT 07060003, ON RIGHT BANK JUST DOWNSTREAM FROM BRIDGE ON COUNTY TRUNK HIGHWAY B, 0.8 MI (1.3 KM) UPSTREAM FROM BLAKELY BRANCH, 2.2 MI (3.5 KM) EAST OF ROCKVILLE, 4.5 MI (7.2 KM) NORTHEAST OF POTOSI, AND 15.2 MI (24.5 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA--142 MI² (368 KM²), REVISED.

PERIOD OF RECORD--OCTOBER 1934 TO CURRENT YEAR. MONTHLY DISCHARGE ONLY FOR OCTOBER AND NOVEMBER 1934, PUBLISHED IN WSP 1308.

REVISED RECORDS--WSP 1438: 1935-36, 1937(M), 1939(M), 1941-43, 1946(M).

GAGE--WATER-STAGE RECORDER. DATUM OF GAGE IS 642.96 FT (195.974 M) ABOVE MEAN SEA LEVEL, ADJUSTMENT OF 1912. PRIOR TO OCT. 1, 1941, NONRECORDING GAGE AT SITE 1.3 MI (2.1 KM) UPSTREAM AT DATUM 12.55 FT (3.82 M) HIGHER. OCT. 1, 1941, TO JUNE 29, 1949, NONRECORDING GAGE AT PRESENT SITE AND DATUM.

REMARKS--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

COOPERATION--NINE DISCHARGE MEASUREMENTS FURNISHED BY CORPS OF ENGINEERS.

AVERAGE DISCHARGE--42 YEARS, 98.4 FT³/S (2.787 M³/S), 9.41 IN/YR (239 MM/YR).

EXTREMES FOR PERIOD OF RECORD--MAXIMUM DISCHARGE, 43,500 FT³/S (1,230 M³/S) JULY 16, 1950, GAGE HEIGHT, 17.26 FT (5.261 M), FROM RATING CURVE EXTENDED ABOVE 7,000 FT³/S (198 M³/S) ON BASIS OF SLOPE-AREA MEASUREMENT OF PEAK FLOW; NO FLOW NOV. 24, 1950.

EXTREMES FOR CURRENT YEAR--PEAK DISCHARGES ABOVE BASE OF 2,100 FT³/S (59.5 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)		GAGE HEIGHT (FT) (M)		DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)		GAGE HEIGHT (FT) (M)	
FEB. 18	0645	2,180	61.7	8.75	2.667	MAR. 12	1130	*2,980	84.4	*9.52	2.902

MINIMUM DISCHARGE, 26 FT³/S (0.736 M³/S) JAN. 3, GAGE HEIGHT, 3.10 FT (0.945 M), RESULT OF FREEZEUP.

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 19-20, DEC. 22 TO JAN. 2, JAN. 5 TO FEB. 17.)

OCT. 1 TO MAR. 4

MAR. 5 TO SEPT. 30

3.1	26	5.0	450	3.0	35	6.0	750
3.4	62	6.0	750	3.4	75	7.0	1,120
4.0	182	7.0	1,120	4.0	194	8.0	1,640
				5.0	452		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	68	110	56	48	108	107	112	74	58	59	47
2	76	73	94	52	47	98	97	106	72	56	54	47
3	75	83	87	48	46	85	92	101	67	55	53	47
4	75	82	62	40	45	444	87	97	65	54	52	47
5	73	75	82	48	45	711	84	96	64	54	52	46
6	73	73	80	50	45	201	82	95	62	54	50	46
7	73	73	72	50	45	189	78	91	61	53	48	46
8	73	73	72	50	48	213	75	87	60	52	47	44
9	73	75	72	49	52	303	74	86	60	52	47	43
10	72	94	72	49	86	382	74	84	60	52	47	42
11	72	76	72	50	150	340	84	83	60	50	47	42
12	73	73	70	54	86	1180	79	82	60	49	47	42
13	72	72	70	56	90	218	76	85	62	50	47	41
14	72	70	87	58	62	150	76	90	74	52	78	41
15	72	70	85	58	150	126	82	86	66	50	56	42
16	70	70	72	58	110	111	81	92	61	52	50	43
17	68	70	44	56	130	98	87	93	60	52	50	43
18	68	68	62	56	1030	98	109	84	60	51	50	44
19	70	68	74	56	252	97	122	79	60	50	49	46
20	70	72	72	56	194	98	113	77	59	52	48	49
21	70	78	65	56	213	93	170	77	58	54	48	47
22	70	73	64	56	114	85	152	74	58	52	48	46
23	70	70	64	54	96	84	141	74	59	51	48	46
24	72	68	64	54	173	82	152	73	59	51	48	46
25	75	67	62	54	420	79	192	72	59	48	59	46
26	70	65	60	52	636	81	168	71	59	48	59	46
27	70	73	58	48	605	102	150	71	58	51	55	46
28	70	70	56	52	328	88	131	70	56	204	65	46
29	68	140	56	50	158	92	117	70	56	82	52	46
30	68	328	56	50	---	107	115	87	58	61	49	46
31	68	---	56	49	---	113	---	77	---	107	48	---
TOTAL	2219	2510	2192	1625	5504	6256	3247	2622	1847	1857	1610	1349
MEAN	71.6	83.7	70.7	52.4	190	202	108	84.6	61.6	59.9	51.9	45.0
MAX	78	328	110	58	1030	1180	192	112	74	204	78	49
MIN	68	65	44	40	45	79	74	70	56	48	47	41
CFSM	.50	.59	.50	.37	1.34	1.42	.76	.60	.43	.42	.37	.32
IN.	.58	.66	.57	.43	1.44	1.64	.85	.69	.48	.49	.42	.35

CAL YR 1975 TOTAL 49480 MEAN 136 MAX 2320 MIN 44 CFSM .96 IN 12.96
WTR YR 1976 TOTAL 32838 MEAN 89.7 MAX 1180 MIN 40 CFSM .63 IN 8.60

05415000 GALENA RIVER AT BUNCOMBE, WI

LOCATION.--LAT 42°30'49", LONG 90°22'40", IN SW 1/4 SEC.33, T.1 N., R.1 E., LAFAYETTE COUNTY, HYDROLOGIC UNIT 07060005, ON LEFT BANK AT BUNCOMBE, 0.6 MI (1.0 KM) UPSTREAM FROM COON BRANCH, 1.5 MI (2.4 KM) UPSTREAM FROM SCRABBLE BRANCH, 2.0 MI (3.2 KM) UPSTREAM FROM WISCONSIN-ILLINOIS STATE LINE, AND 3.5 MI (5.6 KM) SOUTHEAST OF HAZEL GREEN.

DRAINAGE AREA.--125 MI² (324 KM²) REVISED.

PERIOD OF RECORD.--SEPTEMBER 1939 TO CURRENT YEAR.

REVISED RECORDS.--WSP 1438: 1942(P), 1943(M), 1944(P), 1945(M).

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 682.77 FT (208.108 M) ABOVE MEAN SEA LEVEL, ADJUSTMENT OF 1912 (CORPS OF ENGINEERS BENCH MARK), PRIOR TO DEC. 1, 1939, NONRECORDING GAGE AT SAME SITE AND DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

AVERAGE DISCHARGE.--37 YEARS, 77.6 FT³/S (2.198 M³/S), 8.43 IN/YR (214 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 29,700 FT³/S (841 M³/S) JUNE 29, 1969, GAGE HEIGHT, 19.57 FT (5.965 M) FROM RATING CURVE EXTENDED ABOVE 8,100 FT³/S (229 M³/S) ON BASIS OF SLOPE-AREA MEASUREMENTS AT GAGE HEIGHTS 15.68 FT (4.779 M) AND 19.57 FT (5.965 M); MINIMUM, 0.8 FT³/S (0.023 M³/S) MAR. 3, 1954.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--FLOOD OF FEBRUARY 1937 REACHED A STAGE OF ABOUT 17.1 FT (5.212 M), FROM INFORMATION BY LOCAL RESIDENT, DISCHARGE, 18,000 FT³/S (510 M³/S).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 5,400 FT³/S (153 M³/S), MAR. 4, GAGE HEIGHT, 12.71 FT (3.874 M), NO OTHER PEAK ABOVE BASE OF 3,000 FT³/S (85.0 M³/S); MINIMUM, 4.8 FT³/S (0.136 M³/S) DEC. 17, GAGE HEIGHT, 2.44 FT (0.744 M), RESULT OF FREEZEUP.

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 1-5, DEC. 18 TO FEB. 17.)

OCT. 1 TO MAR. 4				MAR. 5 TO SEPT. 30			
2.8	20	5.0	454	2.7	18	5.0	454
3.0	39	6.0	796	3.0	40	6.0	796
3.5	110	7.0	1,230	3.5	110	7.0	1,230
4.0	203	8.0	1,730	4.0	203		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	43	54	34	29	66	75	67	44	30	31	20
2	43	50	46	27	29	64	66	62	40	29	24	21
3	42	58	45	20	29	59	61	59	39	29	22	20
4	43	49	44	23	28	1300	58	56	37	28	22	19
5	42	44	45	27	28	1020	54	56	37	28	24	20
6	42	43	48	34	29	165	52	107	36	27	24	19
7	42	46	54	37	30	141	48	59	37	29	22	19
8	42	46	45	25	31	155	45	54	35	29	22	18
9	43	46	42	24	34	109	43	51	35	27	21	18
10	43	63	42	29	42	129	43	49	35	27	21	18
11	42	47	42	32	45	81	51	49	35	24	20	19
12	42	44	39	34	43	427	44	45	35	24	22	18
13	43	43	41	32	40	148	41	51	37	24	21	19
14	44	40	51	32	38	90	41	57	58	27	26	18
15	46	41	46	30	60	74	48	54	41	26	25	18
16	42	43	35	30	68	70	61	64	36	25	22	19
17	42	43	21	29	80	58	47	61	34	24	21	19
18	42	40	26	29	243	62	64	50	34	23	22	19
19	42	40	30	29	267	59	65	48	34	24	21	23
20	46	43	41	30	171	60	58	46	32	26	20	26
21	43	48	38	31	290	57	122	47	32	28	19	22
22	42	42	37	31	97	51	112	43	31	25	19	21
23	44	40	37	32	109	49	95	44	33	30	20	21
24	44	41	37	31	120	49	106	45	35	27	18	20
25	46	51	37	32	649	47	126	42	36	23	19	21
26	43	51	36	31	879	50	101	43	33	24	20	22
27	40	46	36	30	391	91	88	42	30	23	21	23
28	42	46	35	29	164	65	80	42	35	40	38	22
29	42	55	35	29	80	64	73	44	33	38	30	21
30	41	147	35	29	---	83	71	48	33	27	22	22
31	41	---	34	29	---	79	---	46	---	29	20	---
TOTAL	1327	1479	1234	921	4143	5022	2039	1631	1082	844	699	605
MEAN	42.8	49.3	39.8	29.7	143	162	68.0	52.6	36.1	27.2	22.5	20.2
MAX	46	147	54	37	879	1300	126	107	58	40	38	26
MIN	40	40	21	20	28	47	41	42	30	23	18	18
CFSM	.34	.39	.32	.24	1.14	1.30	.54	.42	.29	.22	.18	.16
IN.	.39	.44	.37	.27	1.23	1.49	.61	.49	.32	.25	.21	.18
CAL YR 1975 TOTAL	36455			MEAN 99.9	MAX 3470	MIN 21	CFSM .80	IN 10.85				
WTR YR 1976 TOTAL	21026			MEAN 57.4	MAX 1300	MIN 18	CFSM .46	IN 6.26				

ROCK RIVER BASIN

05425830 MAUNESHA RIVER NEAR SUN PRAIRIE, WI

LOCATION.--LAT 43°13'10", LONG 89°08'05", IN SW 1/4 NE 1/4 SEC.25, T.9N., R.11E., DANE COUNTY, HYDROLOGIC UNIT 07090001, AT NONRECORDING GAGE AT BRIDGE ON TOWN ROAD 4.7 MI (7.6 KM) NORTHEAST OF SUN PRAIRIE.

DRAINAGE AREA.--37.1 MI² (96.1 KM²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--FEBRUARY TO SEPTEMBER 1976.

WATER QUALITY DATA, FEBRUARY TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
FEB , 1976				
12...	1730	10	43	1.2
17...	1115	16	22	.95
25...	2130	15	1	.04
26...	1300	16	70	3.0
27...	0930	27	19	1.4
27...	1620	52	546	77
27...	1800	60	509	82
28...	0800	51	75	10
28...	0930	59	106	17
MAR				
05...	0815	238	73	47
12...	0805	213	848	488
12...	0910	236	601	383
12...	1815	E450	619	E752
APR				
21...	0715	76	764	157
MAY				
16...	2010	26	73	5.1

E ESTIMATED.

ROCK RIVER BASIN

375

05426000 CRAWFISH RIVER AT MILFORD, WI

LOCATION.--LAT 43°06'00", LONG 88°50'58", IN SW 1/4 SEC.4, T.7 N., R.14 E., JEFFERSON COUNTY, HYDROLOGIC UNIT 07090002, NEAR LEFT BANK ON UPSTREAM SIDE OF HIGHWAY BRIDGE IN MILFORD, 1.4 MI (2.2 KM) DOWNSTREAM FROM ROCK CREEK AND 9.8 MI (15.8 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--732 MI² (1,896 KM²).

PERIOD OF RECORD.--JUNE 1931 TO CURRENT YEAR.

REVISED RECORD.--WSP 805: DRAINAGE AREA. WSP 975: 1937-38. WSP 1438: 1932-33(M), 1935(M), 1937, 1938-41(M), 1943-44(M), 1947-48(M).

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 779.40 FT (237.561 M) ABOVE MEAN SEA LEVEL. PRIOR TO JULY 28, 1966, NONRECORDING GAGE AT PRESENT SITE AND DATUM.

REMARKS.--RECORDS ARE FAIR. SOME DIURNAL FLUCTUATION AT LOW FLOW POSSIBLE, DUE TO SMALL DAMS UPSTREAM.

AVERAGE DISCHARGE.--45 YEARS, 358 FT³/S (10.14 M³/S), 6.64 IN/YR (169 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 6,140 FT³/S (174 M³/S) APR. 6, 1959, GAGE HEIGHT, 11.15 FT (3.398 M); MINIMUM OBSERVED, 0.2 FT³/S (0.006 M³/S) SEPT. 15, 1958, GAGE HEIGHT, 1.11 FT (0.338 M).

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 1,250 FT³/S (35.4 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)	DATE	TIME	DISCHARGE (FT ³ /S)	DISCHARGE (M ³ /S)	GAGE HEIGHT (FT)	GAGE HEIGHT (M)
MAR. 16	1600	*2,420	68.5	*6.76	2.060	APR. 28	1100	1,630	46.2	5.33	1.625

MINIMUM DAILY DISCHARGE, 19 FT³/S (0.54 M³/S) SEPT. 13.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 16 TO FEB. 20.)

1.4	13	2.5	280
1.5	20	3.0	495
1.6	30	4.0	950
1.7	45	6.0	2,000
2.0	112	8.0	3,270

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	72	179	160	120	761	1680	1490	189	61	76	94
2	79	94	227	150	120	789	1620	1440	179	57	86	65
3	56	101	246	140	110	780	1590	1350	172	57	84	39
4	70	117	246	130	110	917	1550	1210	152	54	72	72
5	65	120	265	130	110	1290	1400	1120	137	47	86	63
6	117	120	280	120	100	1500	1200	1150	131	40	94	42
7	104	106	246	120	100	1570	1080	1080	120	44	79	36
8	104	134	227	120	100	1630	990	983	109	42	70	44
9	86	120	213	120	110	1650	1100	893	96	24	54	63
10	96	106	196	120	110	1700	1250	820	74	34	36	47
11	94	143	179	120	120	1750	1350	798	96	56	40	34
12	65	149	165	120	130	1940	1280	706	63	54	45	25
13	63	199	162	120	140	2140	1100	629	63	32	56	19
14	72	131	175	120	160	2240	750	570	94	37	72	33
15	96	123	261	110	200	2360	620	511	59	34	67	48
16	96	125	230	110	250	2400	556	503	112	50	57	44
17	101	114	200	110	300	2320	625	520	86	37	52	34
18	106	123	170	100	400	2220	660	507	101	39	44	32
19	84	112	150	100	500	2140	696	494	114	26	45	36
20	70	101	140	100	600	2000	669	477	91	27	50	52
21	79	155	140	110	652	2060	683	459	74	54	52	48
22	70	125	240	110	652	2020	747	413	74	47	56	28
23	42	117	150	100	652	1930	834	382	59	52	54	45
24	40	140	140	100	629	1880	1030	348	67	57	47	29
25	89	117	130	110	652	1890	1370	290	63	50	45	31
26	67	96	130	110	674	1780	1440	268	47	40	65	34
27	61	101	130	120	638	1850	1570	242	65	47	59	39
28	112	99	130	120	647	1740	1620	220	65	45	109	29
29	99	112	140	120	669	1700	1600	213	72	61	109	27
30	63	143	140	110	---	1670	1550	196	86	42	76	27
31	24	---	140	110	---	1680	---	196	---	81	81	---
TOTAL	2464	3615	5767	3640	9755	54297	34210	20487	2910	1428	2018	1259
MEAN	79.5	121	186	117	336	1752	1140	661	97.0	46.1	65.1	42.0
MAX	117	199	280	160	674	2400	1680	1490	189	81	109	94
MIN	24	72	130	100	100	761	556	196	47	24	36	19
CFSM	.11	.17	.25	.16	.46	2.39	1.56	.90	.13	.06	.09	.06
IN.	.13	.18	.29	.18	.50	2.76	1.74	1.04	.15	.07	.10	.06
CAL YR 1975 TOTAL	187386		MEAN 513	MAX 4800	MIN 24	CFSM .70	IN 9.52					
WTR YR 1976 TOTAL	141850		MEAN 388	MAX 2400	MIN 19	CFSM .53	IN 7.21					

ROCK RIVER BASIN

05427570 ROCK RIVER AT INDIANFORD, WI

LOCATION.--LAT 42°48'15", LONG 89°05'25", IN SW 1/4 SW 1/4 SEC.16, T.4 N., R.12 E., ROCK COUNTY, HYDROLOGIC UNIT 07090001, ON RIGHT BANK 50 FT (15 M) UPSTREAM FROM BRIDGE ON COUNTY TRUNK HIGHWAYS F AND M, 250 FT (76 M) UPSTREAM FROM DAM IN INDIANFORD, AND 1.8 MI (2.9 KM) UPSTREAM FROM YAHARA RIVER.

DRAINAGE AREA.--2.573 MI² (6,664 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--MAY 1975 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 763.74 FT (232.8 M) ABOVE MEAN SEA LEVEL.

REMARKS.--WATER-DISCHARGE RECORD GOOD. NATURAL FLOW OF STREAM AFFECTED BY DAM IN INDIANFORD.

EXTREMES FOR CURRENT PERIOD.--MAY 8 TO SEPTEMBER 1975: MAXIMUM DISCHARGE DURING PERIOD, 5,470 FT³/S (155 M³/S) MAY 8, GAGE HEIGHT, 14.16 FT (4.316 M); MINIMUM DAILY, 124 FT³/S (3.51 M³/S) SEPT. 19.

WATER YEAR 1976: MAXIMUM DISCHARGE, 5,340 FT³/S (151 M³/S) MAR. 16, GAGE HEIGHT, 14.11 FT (4.301 M); MINIMUM DAILY, 115 FT³/S (3.26 M³/S) JULY 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	2040	2150	586	1360
2								---	1990	1960	589	1410
3								---	1990	1840	602	1130
4								---	1980	1930	589	1090
5								---	2140	1820	658	1080
6								---	2220	1820	623	1030
7									2260	1800	537	930
8								5390	2250	1700	456	998
9								5230	2220	1570	505	932
10								5040	2180	1510	534	830
11								4910	2030	1410	587	865
12								4830	1810	1380	543	797
13								4570	1940	1320	519	747
14								4370	2020	1020	527	706
15								4260	1970	663	510	672
16								4110	1990	662	459	660
17								3930	2070	660	457	480
18								3710	2180	600	477	220
19								3440	2300	573	455	124
20								3300	2370	631	431	134
21								3140	2410	625	384	180
22								3010	2400	573	673	238
23								2880	2500	574	664	293
24								2760	2550	669	671	539
25								2620	2530	932	739	653
26								2510	2480	1150	784	520
27								2420	2450	1130	861	513
28								2280	2430	938	878	504
29								2170	2330	615	1320	492
30								2100	2240	627	1510	387
31								2050	---	629	1410	---
TOTAL								---	66270	35481	20538	20514
MEAN								---	2209	1145	663	684
MAX								---	2550	2150	1510	1410
MIN								---	1810	573	384	124
CFSM								---	.86	.45	.26	.27
IN.								---	.96	.51	.30	.30

05427570 ROCK RIVER AT INDIANFORD, WI--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	330	332	589	768	448	2750	4550	3830	1660	315	231	314
2	333	414	930	690	433	2850	4500	3850	1580	321	235	246
3	263	448	988	718	433	2890	4590	3840	1450	347	188	144
4	322	511	1040	767	433	3150	4570	3690	1060	311	149	231
5	266	511	1370	940	433	3400	4330	3700	515	296	237	249
6	369	629	1590	1040	418	3680	4330	4090	504	260	274	203
7	362	647	1380	1020	403	4100	4330	3880	802	279	217	179
8	376	695	1360	914	418	4430	4150	3700	901	269	203	205
9	350	704	1340	879	411	4620	3990	3630	836	178	197	216
10	346	472	1280	874	418	4710	3880	3550	513	152	157	168
11	386	762	1310	820	403	4760	4120	3640	482	234	143	155
12	360	690	1260	780	381	4830	3840	3490	406	278	143	143
13	296	865	1140	760	455	4980	3730	3390	390	216	223	121
14	340	768	1070	691	472	5060	3550	3270	514	185	283	155
15	306	722	1230	509	455	5230	3460	3230	355	179	250	214
16	376	776	1130	414	807	5280	3310	3200	497	198	218	196
17	461	735	1070	411	1120	5310	3250	3300	509	157	208	172
18	417	863	1080	408	1230	5280	3150	3120	506	157	189	173
19	340	870	1070	403	1330	5230	3170	3030	538	120	185	188
20	293	805	1060	403	1490	5010	3170	2920	505	127	182	208
21	336	884	1060	403	1740	5080	3090	2960	493	222	174	191
22	312	804	1060	411	1690	5130	3090	2830	465	171	179	178
23	273	816	1070	411	1710	4620	3190	2740	463	162	205	175
24	289	908	1080	396	1780	4640	3480	2620	584	184	187	160
25	269	848	1100	418	1860	4760	3790	2430	445	166	180	186
26	306	697	1110	411	1990	4640	3480	2290	359	115	210	189
27	308	686	1070	418	2160	4710	3620	2170	400	162	170	212
28	390	688	1070	411	2370	4620	3770	2060	282	174	250	150
29	397	663	560	433	2500	4620	3840	1960	335	202	297	141
30	343	478	340	433	---	4400	3710	1860	373	159	235	156
31	238	---	608	425	---	4520	---	1760	---	252	218	---
TOTAL	10353	20691	33415	18779	30191	139290	113030	96030	18724	6568	6417	5618
MEAN	334	690	1078	606	1041	4493	3768	3098	624	212	207	187
MAX	461	908	1590	1040	2500	5310	4590	4090	1660	347	297	314
MIN	238	332	340	396	381	2750	3090	1760	282	115	143	121
CFSM	.13	.27	.42	.24	.40	1.75	1.46	1.20	.24	.08	.08	.07
IN.	.15	.30	.48	.27	.44	2.01	1.63	1.39	.27	.09	.09	.08
WTR YR 1976 TOTAL	499106		MEAN	1364	MAX	5310	MIN	115	CFSM .53	IN	7.22	

ROCK RIVER BASIN

05427570 ROCK RIVER AT INDIANFORD, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--MAY 1975 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: MAY TO SEPTEMBER 1976.

PH: MAY TO SEPTEMBER 1976.

WATER TEMPERATURES: MAY 1975 TO CURRENT YEAR.

DISSOLVED OXYGEN: MAY TO SEPTEMBER 1976.

INSTRUMENTATION.--TEMPERATURE RECORDER MAY 17, 1975 TO MAY 6, 1976, FOUR-PARAMETER WATER-QUALITY MONITOR SINCE MAY 7, 1976.

REMARKS.--UNPUBLISHED RECORDS OF HOURLY SPECIFIC CONDUCTANCE, PH, WATER TEMPERATURES, AND DISSOLVED OXYGEN ARE AVAILABLE IN FILES OF DISTRICT OFFICE.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: MAXIMUM, 640 MICROMHOS SEPT. 25, 1976; MINIMUM, 453 MICROMHOS AUG. 6, 1976.

PH: MAXIMUM, 10.9 UNITS JULY 30, 1976; MINIMUM, 8.3 UNITS SEPT. 30, 1976.

WATER TEMPERATURES: MAXIMUM, 30.5°C JULY 31, 1975; MINIMUM, 0.5°C FEB. 1-10, 1976.

DISSOLVED OXYGEN: MAXIMUM, 14.5 MG/L JULY 16, 1976; MINIMUM, 1.3 MG/L AUG. 25, 1976.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), MAY TO SEPTEMBER 1976

DAY	MAY		
	MAX	MIN	MEAN
1	---	---	---
2	---	---	---
3	---	---	---
4	---	---	---
5	---	---	---
6	---	---	---
7	591	582	587
8	590	576	583
9	584	576	580
10	584	570	578
11	583	568	576
12	573	548	557
13	574	550	564
14	578	562	570
15	571	542	555
16	604	555	585
17	587	572	583
18	599	582	592
19	600	584	593
20	622	591	607
21	626	516	573
22	529	518	525
23	532	522	526
24	540	526	533
25	544	528	536
26	546	534	540
27	543	532	537
28	541	532	536
29	546	535	540
30	552	542	547
31	558	548	554
MONTH	626	516	562

ROCK RIVER BASIN

05427570 ROCK RIVER AT INDIANFDRD, WI--CONTINUED

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), MAY TO SEPTEMBER 1976

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	561	553	557	611	603	607	461	468	474	466	475	481
2	562	553	558	608	594	602	463	466	475	491	478	486
3	570	555	561	605	595	599	487	473	481	493	482	488
4	570	557	564	606	597	602	484	471	479	498	483	490
5	573	565	569	608	596	600	481	466	473	497	483	489
6	581	569	575	605	595	600	474	453	464	504	486	496
7	582	574	579	609	595	602	471	459	465	511	496	503
8	586	579	582	602	581	592	477	466	472	513	504	508
9	589	580	585	595	569	586	479	472	476	523	496	510
10	594	583	591	580	553	569	494	471	489	525	515	521
11	602	592	596	557	523	544	497	487	491	522	509	516
12	604	595	600	534	511	524	503	486	495	521	508	514
13	611	597	603	548	522	535	499	479	491	523	508	517
14	600	582	593	543	524	532	489	473	485	528	513	521
15	601	586	593	545	510	526	485	467	476	528	517	522
16	595	589	592	513	483	501	488	472	479	529	517	521
17	598	588	592	502	483	496	489	477	483	534	523	527
18	599	589	594	494	464	489	495	473	484	535	526	530
19	599	588	593	492	473	484	497	476	486	539	519	531
20	600	587	592	485	473	480	508	486	496	534	520	526
21	597	590	593	483	466	474	508	489	498	531	521	526
22	598	587	593	485	473	477	505	490	499	537	523	531
23	597	582	590	500	479	490	505	493	498	547	527	539
24	592	581	586	497	481	490	509	494	501	555	544	552
25	590	577	584	500	481	489	518	489	506	557	547	552
26	591	579	585	503	485	492	506	488	497	560	548	556
27	595	584	590	503	488	498	505	489	497	569	559	564
28	599	590	594	503	461	490	502	480	493	573	566	570
29	602	592	598	482	468	475	486	478	482	578	570	574
30	608	599	604	490	469	480	493	475	486	584	573	578
31	---	---	---	483	472	477	492	477	484	---	---	---
MONTH	611	553	586	611	461	529	518	453	486	584	475	525
YEAR	626	453	536									

PH (UNITS), MAY TO SEPTEMBER 1976

DAY	MAY		
	MAX	MIN	MEAN
1	---	---	---
2	---	---	---
3	---	---	---
4	---	---	---
5	---	---	---
6	---	---	---
7	8.7	8.6	8.7
8	8.8	8.6	8.7
9	8.8	8.7	8.7
10	9.0	8.7	8.8
11	9.1	8.8	9.0
12	9.1	9.1	9.1
13	9.1	9.0	9.0
14	9.0	8.9	9.0
15	9.0	8.8	8.9
16	8.8	8.7	8.7
17	8.7	8.6	8.6
18	8.6	8.5	8.5
19	8.6	8.5	8.6
20	8.6	8.4	8.5
21	8.7	8.4	8.5
22	8.7	8.7	8.7
23	8.8	8.7	8.7
24	8.8	8.7	8.7
25	8.8	8.7	8.7
26	8.9	8.8	8.8
27	8.9	8.8	8.8
28	8.8	8.7	8.7
29	8.7	8.6	8.6
30	8.7	8.6	8.6
31	8.6	8.5	8.6
MONTH	9.1	8.4	8.7

ROCK RIVER BASIN
05427570 ROCK RIVER AT INDIANFORD, WI--CONTINUEO

PH (UNITS), MAY TO SEPTEMBER 1976

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.6	8.5	8.5	8.7	8.7	8.7	9.1	9.1	9.1	9.2	9.0	9.1
2	8.6	8.5	8.5	8.8	8.7	8.7	9.1	9.1	9.1	9.1	8.9	9.0
3	8.5	8.5	8.5	8.8	8.7	8.8	10.7	9.0	10.1	9.0	8.9	8.9
4	8.9	8.5	8.6	8.7	8.7	8.7	10.5	10.3	10.4	9.0	8.9	8.9
5	8.9	8.8	8.8	8.7	8.6	8.6	10.4	10.1	10.2	9.1	9.0	9.0
6	8.9	8.8	8.8	8.7	8.5	8.6	10.1	10.0	10.0	9.1	8.9	9.0
7	8.8	8.7	8.8	8.7	8.5	8.6	9.9	9.7	9.8	9.0	8.9	8.9
8	8.7	8.7	8.7	8.7	8.6	8.7	9.6	9.5	9.5	9.0	8.8	8.9
9	8.7	8.6	8.6	8.9	8.5	8.7	9.3	9.2	9.3	9.1	8.9	9.0
10	8.6	8.5	8.6	8.9	8.7	8.8	9.2	8.9	9.2	9.0	8.9	9.0
11	8.5	8.5	8.5	8.9	8.7	8.9	9.1	9.0	9.1	9.2	9.0	9.1
12	8.6	8.5	8.5	9.0	8.8	8.9	9.2	9.0	9.1	9.2	9.0	9.1
13	8.6	8.4	8.5	8.9	8.7	8.8	9.3	9.0	9.1	9.1	9.0	9.1
14	8.6	8.4	8.5	8.9	8.7	8.8	9.1	9.0	9.0	9.1	8.9	9.0
15	8.6	8.5	8.5	9.1	8.6	8.8	9.2	9.0	9.1	9.0	9.0	9.0
16	8.6	8.5	8.6	9.3	9.0	9.1	9.2	9.0	9.1	9.0	9.0	9.0
17	8.7	8.6	8.6	9.3	9.0	9.1	9.1	9.0	9.1	9.0	8.9	8.9
18	8.7	8.7	8.7	9.2	9.1	9.1	9.2	9.0	9.1	9.0	8.8	8.9
19	8.7	8.6	8.7	9.2	9.0	9.1	9.2	9.0	9.1	9.0	8.8	8.9
20	8.8	8.7	8.7	9.2	9.0	9.0	9.3	9.0	9.1	9.0	8.8	8.9
21	8.7	8.7	8.7	9.3	9.0	9.2	9.2	9.0	9.1	8.9	8.9	8.9
22	8.7	8.7	8.7	9.2	9.0	9.1	9.2	8.9	9.1	8.9	8.8	8.8
23	8.7	8.6	8.7	9.3	9.0	9.1	9.1	8.9	9.0	8.9	8.9	8.9
24	8.7	8.6	8.6	9.7	9.4	9.5	9.0	8.8	9.0	8.9	8.7	8.8
25	8.7	8.6	8.6	9.8	9.6	9.7	8.9	8.7	8.8	8.9	8.8	8.8
26	8.7	8.6	8.7	10.0	9.7	9.9	8.9	8.7	8.8	8.9	8.7	8.8
27	8.7	8.5	8.6	10.2	9.9	10.0	9.1	8.7	8.8	8.7	8.6	8.7
28	8.6	8.5	8.5	10.5	10.0	10.2	9.2	8.9	9.0	8.6	8.4	8.5
29	8.6	8.5	8.6	10.6	10.3	10.5	9.2	9.1	9.1	8.5	8.4	8.5
30	8.8	8.7	8.7	10.9	9.1	9.7	9.2	9.1	9.1	8.5	8.3	8.4
31	---	---	---	9.1	9.1	9.1	9.2	9.0	9.1	---	---	---
MONTH	8.9	8.4	8.6	10.9	8.5	9.1	10.7	8.7	9.2	9.2	8.3	8.9

TEMPERATURE (DEG. C) OF WATER, MAY TO SEPTEMBER 1975

DAY	MAY		
	MAX	MIN	MEAN
1	---	---	---
2	---	---	---
3	---	---	---
4	---	---	---
5	---	---	---
6	---	---	---
7	---	---	---
8	---	---	---
9	---	---	---
10	---	---	---
11	---	---	---
12	---	---	---
13	---	---	---
14	---	---	---
15	---	---	---
16	---	---	---
17	7.5	7.0	7.5
18	7.0	7.0	7.0
19	7.0	6.5	7.0
20	6.5	6.5	6.5
21	6.5	6.0	6.5
22	6.0	6.0	6.0
23	6.0	5.5	5.5
24	5.5	5.0	5.5
25	5.5	5.0	5.0
26	5.0	5.0	5.0
27	5.0	4.5	5.0
28	4.5	4.5	4.5
29	4.5	4.0	4.0
30	4.0	4.0	4.0
31	4.0	4.0	4.0
MONTH	---	---	---

05427570 ROCK RIVER AT INDIANFORD, WI--CONTINUED

TEMPERATURE (DEG. C) OF WATER, MAY TO SEPTEMBER 1975

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	29.5	28.0	29.0	30.0	27.5	29.0	23.0	21.0	21.5
2	---	---	---	29.5	28.0	29.0	28.5	26.5	27.5	24.0	22.5	23.0
3	---	---	---	28.0	26.0	27.0	28.0	26.5	27.0	25.0	22.5	23.5
4	---	---	---	27.5	26.0	26.5	30.0	26.5	28.0	23.5	22.5	23.0
5	---	---	---	28.0	26.5	27.0	28.0	26.5	27.5	22.5	21.0	22.0
6	---	---	---	27.0	26.0	26.5	26.5	25.5	26.0	21.5	20.5	21.0
7	---	---	---	28.0	26.5	27.0	26.0	24.5	25.0	21.0	19.5	20.5
8	---	---	---	29.0	27.0	28.0	25.0	24.0	24.5	21.0	19.0	20.0
9	---	---	---	27.5	26.5	27.0	25.0	24.5	24.5	20.0	18.5	19.5
10	---	---	---	26.5	25.0	25.5	24.5	23.5	24.0	21.0	18.5	19.5
11	---	---	---	25.0	23.0	24.0	26.0	24.0	24.5	20.5	20.0	20.5
12	---	---	---	23.0	21.5	22.0	26.0	24.0	25.0	20.0	17.5	18.5
13	---	---	---	22.5	21.0	22.0	27.5	25.0	26.0	18.0	16.0	17.0
14	21.0	20.5	21.0	24.0	22.0	23.0	25.5	24.5	25.5	17.0	15.5	16.0
15	21.0	20.0	20.5	25.5	22.0	23.5	27.5	24.5	25.5	17.0	16.0	16.5
16	20.0	19.5	19.5	26.5	24.0	25.0	26.5	25.0	25.5	17.5	17.0	17.0
17	21.0	19.5	20.0	27.0	25.0	26.0	27.5	25.0	26.0	19.0	17.0	18.0
18	21.5	20.5	21.0	28.5	26.0	27.0	26.0	24.0	25.0	19.0	17.5	18.5
19	25.0	21.5	23.0	29.0	26.5	27.5	24.5	23.0	23.5	19.5	18.5	19.0
20	25.5	23.5	24.5	28.5	26.5	27.0	25.0	22.5	23.0	18.5	17.0	18.0
21	27.0	25.0	26.0	30.0	26.5	27.0	26.0	23.0	24.0	17.0	16.0	16.5
22	26.5	25.0	25.5	29.5	27.0	28.0	25.5	24.0	25.0	16.5	15.5	15.5
23	27.5	25.5	26.5	28.0	26.5	27.5	26.0	24.0	24.5	17.0	15.5	16.0
24	27.5	26.5	27.0	29.0	26.0	26.5	27.0	25.5	26.0	16.0	15.5	15.5
25	27.0	26.0	26.5	29.5	26.0	26.5	26.5	25.5	26.5	15.5	14.5	15.0
26	26.5	25.5	26.0	27.5	25.5	26.5	26.5	24.5	25.0	16.0	14.5	15.0
27	27.0	26.0	26.5	27.5	26.0	26.5	25.5	24.0	24.5	16.0	15.0	15.5
28	28.0	27.0	27.5	29.5	26.0	27.5	25.5	24.0	24.5	16.0	15.0	15.5
29	28.0	27.0	28.0	30.5	26.5	28.0	25.0	23.5	24.5	15.0	14.5	15.0
30	29.5	27.5	28.5	29.5	27.0	28.0	24.5	22.5	23.5	15.5	14.0	15.0
31	---	---	---	30.5	26.5	28.5	22.5	21.5	21.5	---	---	---
MONTH	---	---	---	30.5	21.0	26.5	30.0	21.5	25.0	25.0	14.0	18.0

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.5	14.0	14.5	11.0	11.0	11.0	2.5	1.5	2.0	2.5	2.0	2.0
2	14.5	13.0	13.5	11.5	11.0	11.0	1.5	1.5	1.5	2.0	2.0	2.0
3	14.0	13.0	13.5	12.5	11.0	12.0	1.5	1.5	1.5	2.0	1.5	2.0
4	14.5	13.5	14.0	13.5	12.5	13.0	1.5	1.5	1.5	1.5	1.5	1.5
5	14.5	14.0	14.0	13.5	12.5	13.0	3.5	1.5	2.5	1.5	1.5	1.5
6	17.0	14.0	15.0	13.5	13.0	13.0	3.5	2.0	2.5	1.5	1.5	1.5
7	16.0	15.0	15.5	14.0	13.5	14.0	2.0	1.5	1.5	1.5	1.5	1.5
8	16.0	15.0	15.5	14.0	14.0	14.0	1.5	1.5	1.5	1.5	1.5	1.5
9	16.0	15.0	15.5	14.0	13.0	13.5	1.5	1.5	1.5	1.5	1.5	1.5
10	15.0	14.5	14.5	13.5	12.0	12.5	1.5	1.5	1.5	1.5	1.5	1.5
11	17.0	13.5	15.0	12.0	11.0	11.5	1.5	1.5	1.5	1.5	1.5	1.5
12	15.5	15.0	15.0	11.0	8.5	10.5	1.5	1.5	1.5	1.5	1.5	1.5
13	17.0	15.0	16.0	8.5	8.0	8.5	4.0	1.5	2.5	2.0	1.5	2.0
14	17.5	16.5	17.0	8.0	7.5	7.5	6.5	4.0	5.5	1.5	1.5	1.5
15	17.5	16.5	17.0	7.5	7.5	7.5	6.0	4.5	5.0	1.5	1.5	1.5
16	17.0	15.0	16.0	7.5	7.5	7.5	4.5	2.0	2.5	1.5	1.5	1.5
17	15.0	14.0	14.5	7.5	7.5	7.5	2.0	1.5	1.5	1.5	1.5	1.5
18	14.0	12.5	13.0	9.0	7.5	8.5	1.5	1.5	1.5	1.5	1.0	1.0
19	12.5	12.0	12.0	9.0	8.5	8.5	1.5	1.5	1.5	1.0	1.0	1.0
20	12.0	11.5	12.0	9.0	8.0	8.5	1.5	1.5	1.5	1.0	1.0	1.0
21	13.5	11.5	12.5	8.0	6.5	7.5	1.5	1.5	1.5	1.0	1.0	1.0
22	13.5	12.0	12.5	6.5	5.0	5.5	1.5	1.5	1.5	1.0	1.0	1.0
23	15.0	13.5	14.0	5.0	4.5	5.0	1.5	1.5	1.5	1.0	1.0	1.0
24	15.5	14.5	14.5	4.5	4.0	4.5	1.5	1.5	1.5	1.5	1.0	1.0
25	14.5	13.0	14.0	4.0	4.0	4.0	1.5	1.5	1.5	1.5	1.0	1.5
26	13.0	12.0	12.5	4.0	2.0	3.0	2.0	1.5	1.5	1.0	1.0	1.0
27	12.5	12.0	12.0	2.0	1.5	1.5	2.0	1.5	1.5	1.0	1.0	1.0
28	13.0	12.0	12.0	1.5	1.5	1.5	2.0	2.0	2.0	1.0	1.0	1.0
29	12.5	11.5	12.0	2.5	1.5	2.0	2.0	1.5	2.0	1.0	1.0	1.0
30	11.5	11.5	11.5	3.5	2.5	3.5	2.0	2.0	2.0	1.0	1.0	1.0
31	11.5	11.0	11.5	---	---	---	2.0	2.0	2.0	1.0	1.0	1.0
MONTH	17.5	11.0	14.0	14.0	1.5	8.5	6.5	1.5	2.0	2.5	1.0	1.5

ROCK RIVER BASIN

05427570 ROCK RIVER AT INDIANFORD, WI--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1.0	0.5	1.0	4.5	4.0	4.5	7.5	7.5	7.5	13.5	12.5	13.0
2	0.5	0.5	0.5	4.5	4.5	4.5	7.5	7.5	7.5	13.0	12.5	12.5
3	0.5	0.5	0.5	4.5	4.5	4.5	7.5	7.5	7.5	12.5	11.0	11.5
4	0.5	0.5	0.5	4.5	4.5	4.5	7.5	7.5	7.5	12.5	10.5	11.5
5	0.5	0.5	0.5	4.5	4.5	4.5	7.5	7.5	7.5	13.5	12.0	13.0
6	0.5	0.5	0.5	4.5	4.5	4.5	7.5	7.5	7.5	12.5	11.5	12.0
7	0.5	0.5	0.5	4.5	4.5	4.5	7.5	7.5	7.5	11.5	10.5	11.0
8	0.5	0.5	0.5	4.5	4.5	4.5	12.0	7.5	9.0	12.0	10.0	11.0
9	0.5	0.5	0.5	4.5	4.5	4.5	12.0	11.0	11.5	13.5	11.0	12.0
10	1.5	0.5	1.0	4.5	4.5	4.5	12.5	11.5	12.0	14.5	12.5	13.5
11	2.0	1.0	1.5	4.5	4.5	4.5	12.0	11.5	12.0	15.0	13.5	14.0
12	2.0	1.5	2.0	4.5	4.5	4.5	11.5	11.5	11.5	16.0	14.0	15.5
13	2.5	2.0	2.0	4.5	4.5	4.5	11.5	11.5	11.5	15.5	14.0	14.5
14	2.5	2.5	2.5	4.5	4.5	4.5	---	---	---	17.0	14.0	15.5
15	4.0	2.5	3.0	4.5	4.5	4.5	---	---	---	17.0	16.5	17.0
16	4.5	4.0	4.0	5.0	4.5	5.0	17.0	15.0	16.0	17.5	16.5	17.0
17	4.0	4.0	4.0	5.0	5.0	5.0	18.0	16.5	17.5	17.0	16.0	16.0
18	4.0	4.0	4.0	5.0	5.0	5.0	17.5	17.0	17.5	17.0	15.0	16.0
19	4.0	4.0	4.0	5.0	5.0	5.0	17.0	16.0	17.0	17.5	15.5	16.5
20	4.0	4.0	4.0	5.0	5.0	5.0	16.5	15.0	16.0	18.5	16.5	17.5
21	4.0	4.0	4.0	5.0	5.0	5.0	15.0	14.5	15.0	19.5	17.5	18.5
22	4.0	4.0	4.0	5.0	5.0	5.0	15.0	14.0	14.5	19.0	18.0	18.5
23	4.0	4.0	4.0	5.0	5.0	5.0	14.5	13.5	14.0	18.5	17.5	18.0
24	5.0	4.0	4.0	5.0	5.0	5.0	13.5	11.0	12.5	18.0	16.5	17.0
25	5.0	4.5	4.5	5.0	5.0	5.0	11.0	9.5	10.0	18.5	16.5	17.5
26	4.5	4.0	4.5	5.0	5.0	5.0	11.0	9.0	10.0	19.5	18.0	18.5
27	5.5	4.0	4.5	7.5	5.0	7.0	10.5	9.5	10.0	20.5	19.5	20.0
28	5.5	4.5	4.5	7.5	7.5	7.5	12.0	9.5	11.0	20.5	19.5	20.0
29	4.5	4.5	4.5	7.5	7.5	7.5	13.0	11.0	12.0	19.5	18.5	19.0
30	---	---	---	7.5	7.5	7.5	13.0	11.5	12.0	19.0	19.0	19.0
31	---	---	---	7.5	7.5	7.5	---	---	---	19.5	18.5	19.0
MONTH	5.5	0.5	2.5	7.5	4.0	5.0	18.0	7.5	11.5	20.5	10.0	15.5
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.5	19.0	19.5	21.5	20.5	21.0	24.5	23.5	24.0	22.5	21.5	22.0
2	20.5	19.0	19.5	21.5	20.5	21.0	24.5	23.0	23.5	21.0	20.0	20.5
3	21.0	19.0	20.0	23.0	21.0	22.0	23.5	22.0	22.5	21.5	20.0	20.5
4	21.5	19.5	20.5	23.5	22.0	22.5	23.0	22.5	23.0	21.5	20.5	21.0
5	21.5	20.5	21.0	24.5	23.0	23.5	23.5	22.0	22.5	21.5	20.5	21.0
6	22.5	21.0	21.5	24.5	23.5	23.5	22.5	21.5	22.0	21.5	20.0	20.5
7	24.5	22.5	23.0	25.0	24.0	24.0	22.5	21.0	21.5	21.5	20.5	21.0
8	25.0	23.0	24.0	25.0	24.0	24.5	22.5	20.5	21.5	21.0	20.5	21.0
9	25.0	24.0	24.5	25.5	24.0	24.5	22.0	21.5	21.5	22.0	21.0	21.5
10	25.0	24.0	24.5	26.5	24.5	25.5	23.0	21.5	22.5	21.0	19.5	20.0
11	25.0	23.5	24.0	27.0	25.5	26.0	23.5	22.5	22.5	20.0	19.5	19.5
12	26.0	24.5	25.0	26.5	25.0	25.5	24.0	23.0	23.5	20.5	19.5	20.0
13	26.0	24.5	25.0	25.5	24.0	24.5	25.0	23.5	24.0	20.5	19.5	20.0
14	26.0	24.5	25.0	25.5	24.5	25.0	24.0	23.0	23.5	20.5	20.0	20.0
15	25.5	23.5	24.5	25.5	24.5	25.0	23.0	21.0	22.0	20.0	18.5	19.5
16	23.5	22.0	22.5	25.5	24.5	25.0	22.0	21.0	21.0	18.5	18.0	18.5
17	22.0	20.5	21.5	24.5	23.0	23.5	21.5	21.0	21.0	18.0	17.5	18.0
18	22.0	21.0	21.5	23.5	22.5	23.0	21.5	21.0	21.0	17.5	17.0	17.5
19	21.0	20.0	20.5	23.5	23.0	23.5	23.0	21.5	22.0	18.0	17.5	17.5
20	21.5	20.5	21.0	23.5	22.5	23.0	23.0	22.5	22.5	17.5	17.0	17.5
21	22.5	21.0	21.5	24.0	22.5	23.5	24.0	23.0	23.0	17.0	16.0	16.5
22	23.0	22.5	22.5	23.0	22.5	23.0	24.5	23.5	24.0	16.5	15.5	16.0
23	22.5	21.5	22.0	23.5	23.0	23.0	25.0	24.0	24.5	16.0	15.5	15.5
24	21.5	20.5	20.5	25.5	23.5	24.0	24.5	23.5	24.0	15.5	14.0	14.5
25	21.5	19.5	20.0	25.0	23.5	24.5	24.0	23.0	23.5	15.0	14.5	15.0
26	22.5	20.5	21.5	25.5	24.0	25.0	24.0	23.0	23.5	15.0	14.5	14.5
27	23.5	22.0	22.5	25.0	24.0	24.5	25.0	23.5	24.0	14.5	13.5	14.0
28	24.5	23.0	23.5	25.5	24.0	24.5	25.0	23.5	24.0	14.5	13.5	14.0
29	24.0	23.0	23.5	25.0	24.0	24.5	24.0	22.5	23.0	15.0	14.0	14.0
30	22.0	21.5	22.0	25.0	24.0	24.0	23.0	22.0	22.0	15.5	14.0	14.5
31	---	---	---	25.0	24.0	24.5	22.5	21.5	22.0	---	---	---
MONTH	26.0	19.0	22.5	27.0	20.5	24.0	25.0	20.5	22.5	22.5	13.5	18.0

05427570 ROCK RIVER AT INDIANFORD, WI--CONTINUED

DISSOLVED OXYGEN (DO), MG/L, MAY TO SEPTEMBER 1976

MAY												
DAY	MAX	MIN	MEAN									
1	---	---	---									
2	---	---	---									
3	---	---	---									
4	---	---	---									
5	---	---	---									
6	---	---	---									
7	---	---	---									
8	10.2	8.0	8.9									
9	10.0	7.8	9.0									
10	10.2	7.6	8.9									
11	10.9	6.9	8.9									
12	11.0	7.0	8.9									
13	10.5	7.9	8.9									
14	9.6	8.3	8.9									
15	11.4	7.7	9.9									
16	8.1	7.2	7.5									
17	8.0	7.3	7.6									
18	8.4	7.2	7.8									
19	8.9	7.8	8.3									
20	8.9	7.9	8.3									
21	10.4	8.1	9.1									
22	11.0	10.0	10.5									
23	11.6	10.2	10.9									
24	10.5	9.3	9.9									
25	11.0	8.5	9.4									
26	11.8	11.0	11.5									
27	11.1	9.2	10.5									
28	9.2	7.3	8.2									
29	7.3	6.4	6.8									
30	7.2	6.8	7.0									
31	7.0	6.3	6.7									
MONTH	---	---	---									

JUNE			JULY			AUGUST			SEPTEMBER			
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.4	6.3	6.8	7.0	6.1	6.4	11.9	7.2	9.0	10.0	7.3	8.6
2	8.1	6.3	7.2	8.9	6.0	6.9	14.0	7.3	10.1	8.1	5.1	6.3
3	8.6	7.1	7.9	9.2	6.9	8.0	10.2	5.9	7.8	9.3	5.3	7.6
4	10.0	7.1	8.4	8.4	7.0	7.8	10.0	6.0	8.0	8.4	5.2	6.6
5	10.0	8.1	8.9	8.4	6.4	7.2	11.9	5.7	8.2	9.7	5.7	7.6
6	9.8	7.9	8.8	7.8	5.0	6.1	11.0	6.5	8.3	9.2	5.4	7.1
7	8.6	7.0	7.6	8.9	4.8	6.3	12.9	7.0	9.2	8.3	5.7	6.7
8	7.2	5.6	6.2	9.4	6.5	7.6	10.2	6.9	8.5	8.5	5.1	6.4
9	6.3	5.2	5.7	10.1	5.7	7.3	8.3	5.1	6.4	9.6	5.5	7.7
10	6.1	4.9	5.4	10.4	7.3	8.8	8.6	1.9	5.6	7.3	4.0	5.0
11	5.5	4.7	5.0	10.4	6.9	8.8	8.2	5.9	6.8	9.4	5.1	6.4
12	6.7	4.4	5.5	12.1	6.7	9.3	9.1	3.3	6.2	10.4	5.6	7.9
13	7.1	4.8	5.8	8.9	6.6	7.8	11.6	4.1	7.1	10.0	6.8	8.1
14	7.2	5.0	5.8	9.9	7.3	8.5	8.0	5.5	6.8	9.5	5.8	7.4
15	7.2	5.8	6.3	11.7	5.2	8.5	11.3	6.1	8.4	8.9	6.9	8.0
16	7.4	5.9	6.4	14.5	9.4	10.9	9.4	5.6	7.5	9.0	6.7	7.7
17	8.8	6.3	7.0	12.5	7.7	9.7	9.2	5.5	7.2	8.1	5.6	6.9
18	8.1	7.1	7.7	11.6	8.8	9.8	10.6	5.2	7.6	8.2	5.1	6.2
19	8.6	7.2	7.8	9.9	7.1	8.7	9.6	5.2	7.4	10.0	3.5	6.1
20	9.5	8.2	8.7	11.2	6.5	8.1	9.4	3.3	6.2	10.2	5.9	7.7
21	8.7	7.6	8.0	12.8	8.1	10.5	8.5	3.5	6.0	10.1	6.6	7.9
22	8.3	6.6	7.1	10.5	7.1	8.7	10.4	4.8	7.2	10.1	6.7	8.2
23	7.2	6.3	6.7	9.1	6.5	7.6	10.6	5.7	8.0	10.8	8.9	9.7
24	7.6	6.7	7.1	13.7	7.1	10.0	9.8	4.3	7.2	9.7	6.8	7.8
25	9.0	6.8	7.5	10.9	6.4	8.6	6.9	1.3	4.4	9.4	7.5	8.4
26	8.5	7.0	7.7	9.6	3.3	6.7	5.8	2.1	3.9	9.7	7.2	8.2
27	7.8	6.0	6.8	8.9	4.7	6.6	9.4	1.9	4.6	7.2	6.0	6.7
28	7.4	5.0	6.0	11.5	2.9	5.5	9.2	3.3	5.7	6.4	4.5	5.6
29	7.2	5.7	6.4	8.4	3.9	5.9	10.1	5.4	7.2	6.5	5.0	5.6
30	7.5	5.8	6.6	10.7	4.3	6.2	9.6	6.2	7.2	6.7	4.5	5.5
31	---	---	---	---	---	---	10.0	5.3	7.6	---	---	---
MONTH	10.0	4.4	7.0	14.5	2.9	8.0	14.0	1.3	7.1	10.8	3.5	7.2
YEAR	14.5	1.3	7.6									

ROCK RIVER BASIN

05427718 YAHARA RIVER AT WINDSOR, WI

LOCATION.--LAT 43°12'32", LONG 89°21'09", IN NW 1/4 NE 1/4 SEC.31, T.9 N., R.10 E., DANE COUNTY, HYDROLOGIC UNIT 07090001, AT BRIDGE ON ROAD TO LAKE WINDSOR COUNTRY CLUB.

DRAINAGE AREA.--73.56 MI² (190.52 KM²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--FEBRUARY TO SEPTEMBER 1976.

WATER QUALITY DATA, FEBRUARY TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Feb. 28, 1976	1120	2.0	58.2	355	May 24, 1976	1440	17.5	15.1	590
Apr. 22, 1976	1225	9.5	80.4	435	July 9, 1976	1015	21.0	8.92	600

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
FEB , 1976				
10...	1330	8.5	38	.87
12...	1700	44	101	12
17...	1230	20	19	1.0
25...	2200	23	22	1.4
27...	1000	29	23	1.8
28...	1215	46	188	23
28...	2230	32	130	11
MAR				
04...	1540	23	12	.75
05...	0010	202	140	76
05...	1100	148	75	30
11...	1455	211	125	71
12...	0920	340	745	684
12...	1250	410	555	614
12...	2120	544	337	495
13...	0910	512	49	68
13...	1600	392	273	289
14...	1530	320	405	350
15...	0835	186	49	25
26...	1250	28	46	3.5
APR				
15...	2040	120	2110	684
20...	2236	84	1450	331
20...	2240	88	1410	338
20...	2345	95	1060	274
21...	0745	81	783	172
21...	2100	214	1300	751
22...	0130	168	953	432
22...	0720	110	540	160
22...	1510	66	307	55
24...	1930	132	1030	367
MAY				
13...	1245	16	49	2.2
JUN				
11...	1425	12	14	.48
JUL				
08...	1435	10	42	1.2
28...	0945	10	62	1.8
AUG				
02...	1445	9.5	14	.36
25...	1905	46	1070	133
26...	0930	36	182	18
SEP				
29...	1145	9.0	30	.73

05427800 TOKEN CREEK NEAR MADISON, WI

LOCATION.--LAT 43°10'52", LONG 89°19'28", IN SW 1/4 SW 1/4 SEC.4, T.8 N., R.10 E., DANE COUNTY, HYDROLOGIC UNIT 07090001, ON LEFT BANK 100 FT (30 M) UPSTREAM OF CULVERT ON U.S. HIGHWAY 51, 4.4 MI (7.1 KM) NORTH OF JUNCTION WITH U.S. HIGHWAY 151, AND 8.0 MI (12.9 KM) NORTHEAST OF STATE CAPITOL BUILDING IN MADISON.

DRAINAGE AREA.--24.3 MI² (62.9 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--ANNUAL MAXIMUM, WATER YEARS 1961-64, 1967-75; JULY 1964 TO SEPTEMBER 1966 (NO WINTER RECORDS); OCTOBER 1975 TO SEPTEMBER 1976.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 860 FT (262 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 576 FT³/S (16.3 M³/S) MAR. 12, 1976, GAGE HEIGHT, 14.16 FT (4.316 M); MINIMUM, NONE RECORDED.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 576 FT³/S (16.3 M³/S) MAR. 12, GAGE HEIGHT, 14.16 FT (4.316 M); MINIMUM (JANUARY TO SEPTEMBER), 12 FT³/S (0.34 M³/S) SEPT. 22, GAGE HEIGHT, 9.00 FT (2.743 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE JAN. 3 TO FEB. 6.)

9.0	13	11.0	104
9.5	36	12.0	178
10.0	58	13.0	318

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	21	22	20	17	48	32	25	22	19	17	18
2	20	22	21	20	17	41	29	25	22	19	17	18
3	20	24	20	17	17	36	28	25	21	19	17	18
4	19	24	20	16	17	46	26	24	20	19	17	18
5	19	25	20	17	17	149	25	24	20	19	17	18
6	19	25	20	16	17	141	23	25	20	19	17	18
7	19	27	20	16	18	62	23	24	19	19	17	17
8	19	26	20	16	18	39	23	23	19	19	17	17
9	20	23	20	16	18	39	24	23	16	18	16	17
10	21	25	20	16	18	49	23	23	17	18	16	17
11	22	22	20	16	18	72	25	21	17	19	16	17
12	22	22	20	17	20	291	23	21	17	18	16	17
13	23	22	22	17	22	300	22	21	18	18	16	17
14	24	21	29	17	20	85	21	22	19	18	16	17
15	24	20	24	17	26	80	29	24	18	18	16	17
16	24	21	23	17	24	45	31	31	18	18	14	17
17	24	20	22	17	24	32	28	32	18	18	14	16
18	24	20	21	17	30	30	27	28	19	18	15	16
19	23	20	20	17	39	45	26	25	19	18	16	16
20	22	20	20	17	38	51	28	24	18	18	16	16
21	22	22	19	17	33	36	50	22	18	18	16	16
22	22	20	19	17	25	28	44	22	19	18	16	15
23	22	20	18	17	22	26	32	22	20	18	16	16
24	22	20	19	17	23	26	40	21	20	18	16	17
25	24	20	19	17	25	26	61	21	20	18	18	16
26	23	20	19	17	34	28	46	21	19	21	22	16
27	22	20	19	17	58	45	34	21	19	24	22	16
28	22	22	19	17	77	33	24	22	19	26	20	17
29	21	22	19	17	64	31	22	22	20	40	19	17
30	21	28	19	17	---	34	23	22	19	34	19	16
31	20	---	19	17	---	33	---	21	---	18	18	---
TOTAL	669	664	632	526	796	2027	892	727	570	622	525	504
MEAN	21.6	22.1	20.4	17.0	27.4	65.4	29.7	23.5	19.0	20.1	16.9	16.8
MAX	24	28	29	20	77	300	61	32	22	40	22	18
MIN	19	20	18	16	17	26	21	21	16	18	14	15
CFSM	.89	.91	.84	.70	1.13	2.69	1.22	.97	.78	.83	.70	.69
IN.	1.02	1.02	.97	.81	1.22	3.10	1.37	1.11	.87	.95	.80	.77
WTR YR 1976	TOTAL	9154	MEAN	25.0	MAX	300	MIN	14	CFSM	1.03	IN	14.01

ROCK RIVER BASIN

05427800 TOKEN CREEK AT MADISON, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD---WATER YEARS 1968-70, DECEMBER 1975 TO SEPTEMBER 1976.

WATER QUALITY DATA, DECEMBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Dec. 10, 1975	1545	3.0	19.7	600	Apr. 3, 1976	1140	10.5	28.1	-
Jan. 7, 1976	1100	0.5	16.3	560	July 9, 1976	0920	20.0	18.2	580
Feb. 20, 1976	1010	2.0	73.6	260					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDEO SEDI-MENT CHARGE (MG/L)	SUS-PENDEO SEDI-MENT DIS-CHARGE (T/DAY)
FEB. 1976				
12...	1645	20	18	.99
17...	1215	24	30	2.0
25...	2150	25	25	1.7
26...	1345	34	22	2.0
27...	0945	58	21	3.3
27...	1650	67	20	3.6
27...	2345	91	241	59
28...	2200	72	143	28
MAR				
04...	1530	36	7	.68
05...	0015	115	78	24
05...	1045	154	43	18
11...	1445	61	91	15
12...	0935	135	439	160
12...	1305	192	454	235
12...	2135	573	611	945
13...	0920	318	213	183
13...	1605	229	163	101
14...	1545	94	105	27
15...	0820	85	194	45
26...	1310	26	96	6.8
APR				
08...	1420	16	72	3.1
15...	2055	36	355	35
20...	2155	40	82	8.9
20...	2330	39	113	12
21...	0730	36	178	17
21...	2050	78	1100	234
22...	0145	66	415	74
22...	0730	47	173	22
22...	1500	36	155	15
24...	1945	58	196	31
MAY				
13...	1230	19	72	3.9
JUN				
11...	1415	17	65	3.1
JUL				
08...	1420	16	72	3.1
28...	1000	27	62	4.6
AUG				
10...	1315	16	68	2.9
25...	1815	26	54	3.8
SEP				
02...	1500	18	54	2.6
29...	1125	17	66	3.0

05427890 SIXMILE CREEK AT WAUNAKEE, WI

LOCATION.--LAT 43°11'37" LONG 89°27'06", IN SE 1/4 SW 1/4 SEC.5, T.8N., R.9E., DANE COUNTY, HYDROLOGIC UNIT 07090001, AT NONRECORDING GAGE AT BRIDGE ON MADISON STREET IN WAUNAKEE.

DRAINAGE AREA.--3.72 M² (9.6 KM²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--FEBRUARY TO SEPTEMBER 1976.

WATER QUALITY DATA, FEBRUARY TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
FER , 1976				
17...	1245	30	16	1.3
25...	2220	17	23	1.1
26...	1600	27	26	1.9
27...	1010	25	12	.81
27...	1530	41	36	4.0
28...	2315	75	89	18
MAR				
04...	1600	20	56	3.0
04...	2350	74	62	12
11...	1600	48	17	2.2
12...	0845	109	226	67
12...	1210	163	411	181
12...	1550	362	440	430
12...	2035	359	341	322
13...	0600	185	44	22
13...	0840	171	36	17
13...	1510	150	121	49
14...	1430	206	43	24
15...	0900	161	60	26
26...	1220	21	18	1.0
APR				
01...	1115	27	7	.51
09...	1515	9.5	18	.46
15...	1935	41	309	34
21...	0800	37	94	9.4
21...	2125	75	586	119
22...	0115	64	203	35
22...	0700	54	109	16
22...	1520	50	53	7.2
24...	1900	72	539	105
29...	1530	17	16	.73
MAY				
06...	0700	12	20	.65
13...	1310	8.7	17	.40
JUN				
11...	1445	3.9	4	.04
AUG				
10...	1355	3.2	31	.27

ROCK RIVER BASIN

05427900 SIXMILE CREEK NEAR WAUNAKEE, WI

LOCATION.--LAT 43°10'29", LONG 89°25'58", IN NE 1/4 NW 1/4 SEC.16, T.8 N., R.9 E., DANE COUNTY, HYDROLOGIC UNIT 07090001, ON RIGHT BANK AT BRIDGE ON TOWN ROAD, 1.5 MI (2.4 KM) SOUTHEAST OF WAUNAKEE.

DRAINAGE AREA.--41.1 MI² (106.4 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--FEBRUARY TO SEPTEMBER 1976.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 880 FT (268 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS FAIR.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE DURING PERIOD FEBRUARY TO SEPTEMBER 1976, 564 FT³/S (16.0 M³/S) AUG. 25, GAGE HEIGHT, 8.71 FT (2.655 M); MINIMUM DAILY, 3.1 FT³/S (0.088 M³/S) JULY 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					5.6	160	23	8.7	5.3	3.1	4.7	6.2
2					5.6	101	17	7.9	4.8	3.1	4.7	5.5
3					5.6	28	13	7.2	4.7	3.3	5.7	5.1
4					5.6	55	11	7.1	4.3	3.4	4.9	4.8
5					5.6	70	9.7	7.1	4.2	3.5	4.6	4.5
6					5.6	98	8.5	7.5	4.1	3.6	4.4	4.4
7					5.8	120	7.4	7.2	4.2	3.6	4.3	4.2
8					6.0	100	6.4	7.0	4.0	4.5	4.2	4.2
9					10	46	5.9	6.9	4.3	3.9	3.9	4.1
10					20	43	6.6	6.9	4.2	3.6	3.9	4.1
11					25	60	9.3	6.9	4.4	3.6	3.6	4.1
12					35	227	6.6	6.9	4.4	3.6	4.1	4.1
13					45	264	6.1	7.0	4.6	3.6	3.3	4.0
14					54	253	5.4	7.8	5.4	3.6	22	3.9
15					83	229	29	16	5.0	3.6	6.8	3.9
16					34	164	21	28	4.6	4.1	7.3	3.9
17					31	127	16	25	4.7	3.6	8.9	3.9
18					27	85	12	16	5.1	3.5	8.6	3.9
19					16	181	10	12	5.3	3.5	7.4	4.4
20					16	209	15	10	5.6	4.5	6.4	4.6
21					9.1	156	70	9.3	5.6	4.3	5.8	4.7
22					18	103	56	8.3	5.1	4.0	5.6	5.0
23					17	55	45	7.5	7.9	3.5	5.1	5.3
24					12	30	67	6.8	6.3	3.7	4.5	5.2
25					16	20	52	6.6	6.1	4.0	7.9	5.0
26					26	21	36	6.0	7.0	3.9	50	4.9
27					55	38	25	5.7	5.3	4.6	22	4.6
28					81	28	13	5.5	4.0	6.6	50	4.6
29					88	32	9.1	5.4	3.4	9.0	25	4.6
30					---	33	9.0	5.2	3.5	3.8	9.0	4.6
31					---	27	---	5.2	---	8.3	7.4	---
TOTAL					765.5	3163	623.0	280.6	147.6	128.7	387.5	136.3
MEAN					26.4	102	20.8	9.05	4.92	4.15	12.5	4.54
MAX					88	264	70	28	7.9	9.0	7.9	6.2
MIN					5.6	20	5.4	5.2	3.4	3.1	3.3	3.9
CFSM					.64	2.48	.51	.22	.12	.10	.30	.11
IN.					.69	2.86	.56	.25	.13	.12	.35	.12

05427900 SIXMILE CREEK NEAR WAUNAKEE, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD---JANUARY TO SEPTEMBER 1976.

WATER QUALITY DATA, JANUARY TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Jan. 21, 1976	1610	-	5.83	650	Apr. 3, 1976	1315	10.5	21.7	-
Feb. 28, 1976	1435	2.0	71.2	345	Apr. 22, 1976	1500	10.0	55.4	400
Mar. 6, 1976	1200	0.0	74.3	295	May 21, 1976	1420	20.0	9.4	550

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
FEB , 1976				
17...	1300	31	13	1.1
25...	2230	19	25	1.3
26...	1555	35	60	5.8
27...	1015	29	14	1.1
27...	1540	89	302	73
28...	0100	73	110	22
28...	0830	79	33	7.1
28...	2345	93	132	33
MAR				
04...	1600	18	22	1.1
04...	2345	177	60	29
05...	1200	70	81	15
11...	1540	85	159	37
11...	1550	87	159	38
12...	0840	225	526	320
12...	1220	258	678	472
12...	2025	293	425	336
13...	0830	246	45	30
13...	1525	284	43	33
14...	1445	251	118	80
15...	0915	235	194	123
18...	1630	93	716	180
26...	1200	17	57	2.7
APR				
15...	1945	51	903	126
20...	2315	15	446	18
21...	0015	70	509	96
21...	0815	70	190	36
21...	2125	101	1330	363
21...	2135	101	1334	364
22...	0010	83	514	116
22...	0615	61	163	27
22...	0650	60	163	26
22...	1530	52	71	10
24...	1845	101	551	150
28...	0920	3.8	114	1.2
MAY				
13...	1320	6.9	41	.77
JUN				
11...	1455	4.0	19	.21
JUL ,				
28...	0920	3.9	114	1.2
AUG				
10...	1410	4.0	33	.36
10...	1430	4.0	43	.47
25...	--	562	2670	4050
25...	1930	562	2670	4050
25...	2205	135	896	327
SEP				
02...	1340	5.4	29	.42
29...	1225	4.5	30	.37

ROCK RIVER BASIN

05427930 SPRING CREEK NEAR WAUNAKEE, WI

LOCATION.--LAT 43°08'25", LONG 89°26'32", IN NW 1/4 SW 1/4 SEC.29, T.8N., R.9E., DANE COUNTY, HYDROLOGIC UNIT 07090001, AT NONRECORDING GAGE AT BRIDGE ON COUNTY TRUNK HIGHWAY M, 3.6 MI (5.8 KM) SOUTH OF WAUNAKEE.

DRAINAGE AREA.--12.6 MI² (32.6 KM²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--FEBRUARY TO SEPTEMBER 1976.

WATER QUALITY DATA, FEBRUARY TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT DIS- CHARGE (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
FEB , 1976				
17...	1330	6.6	75	1.3
25...	1915	12	66	2.1
27...	1030	22	87	5.2
27...	1550	41	1620	179
27...	1815	37	528	53
28...	0130	40	336	36
28...	0850	53	204	29
28...	2358	62	136	23
MAR				
04...	1615	12	143	4.6
04...	2330	38	59	6.1
05...	1210	57	73	11
11...	1515	49	976	129
12...	0820	110	321	95
12...	1150	168	192	87
12...	2000	170	290	133
13...	0915	159	241	103
13...	1535	160	134	58
14...	1640	54	446	65
26...	1140	8.3	16	.36
APR				
12...	1540	37	146	15
15...	2005	13	206	7.2
21...	0030	24	155	10
21...	0830	16	115	5.0
21...	2200	40	76	8.2
22...	0100	40	93	10
22...	0640	41	128	14
24...	1830	30	114	9.2
MAY				
13...	1400	5.0	104	1.4
JUN				
11...	1520	3.0	50	.40
JUL				
28...	0910	2.8	24	.18
AUG				
10...	1430	3.6	44	.43
25...	1900	13	459	16
25...	2320	13	184	6.5
SEP				
02...	1355	4.0	33	.36
29...	1250	3.8	22	.23

ROCK RIVER BASIN

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05427937 WARNER PARK STORM DITCH AT MADISON, WI

LOCATION.--LAT 43°07'35", LONG 89°21'51", IN NE 1/4 SE 1/4 SEC.36, T.8 N., R.9 E., OANE COUNTY, HYDROLOGIC UNIT 07090001, 50 FEET (15 M) NORTH AND 100 FEET (30 M) WEST OF INTERSECTION OF TRAILSWAY AND SHERMAN AVENUE.

DRAINAGE AREA.--0.57 MI² (1.48 KM²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--FEBRUARY TO SEPTEMBER 1976.

WATER QUALITY DATA, FEBRUARY TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/OAY)
FEB , 1976				
24...	1730	3.2	79	.68
25...	1545	6.4	128	2.2
25...	2100	.88	12	.03
MAR				
04...	1330	9.5	162	4.2
04...	1550	12	248	8.4
04...	2050	10	24	.66
05...	0040	2.8	27	.20
05...	1030	.50	22	.03
12...	0840	1.2	39	.13
12...	1320	6.7	205	3.7
26...	1752	.65	2310	4.1
26...	1755	21	3520	200
26...	1805	13	71	2.5
26...	1815	4.5	1890	23
26...	1840	9.5	539	14
26...	1905	37	842	86
26...	1935	5.0	351	4.7
APR				
15...	1220	23	925	58
15...	1235	9.5	402	10
15...	1250	2.8	231	1.7
15...	1305	1.5	195	.79
15...	1330	1.9	279	1.4
15...	1345	84	722	164
15...	1500	14	1280	49
15...	1515	3.6	604	5.9
15...	1530	1.7	458	2.1
20...	2130	2.4	18	.12
JUN				
29...	1600	.80	70	.15
29...	1625	1.9	53	.27
29...	1645	1.4	45	.17
JUL				
28...	0520	.80	147	.32
28...	0525	6.4	347	6.0
28...	0530	15	318	13
28...	0545	15	171	7.1
28...	0550	13	116	4.3
28...	0610	34	272	25
28...	0625	63	514	87
28...	0645	18	645	33
AUG				
25...	1400	4.0	16	.17
25...	1810	31	345	29
25...	1815	48	298	39
25...	1820	42	269	31
25...	1830	16	196	8.7
25...	1900	3.8	92	.94
25...	1920	37	120	12
25...	1950	14	84	3.4
25...	2020	21	47	2.7

ROCK RIVER BASIN

05427948 PHEASANT BRANCH AT MIDDLETON, WI

LOCATION.--LAT 43°06'12", LONG 89°30'42", IN NE 1/4 NW 1/4 SEC.11, T.7 N., R.8 E., DANE COUNTY, HYDROLOGIC UNIT 07090001, ON LEFT BANK AT BRIDGE ON U.S. HIGHWAY 12, 2.5 MI (4.0 KM) UPSTREAM FROM LAKE MENDOTA, AT MIDDLETON.

DRAINAGE AREA.--18.3 MI² (47.40 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--JULY 1974 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 910 FT (277 M), FRDM TOPOGRAPHIC MAP.

REMARKS.--RECORDS 6000 EXCEPT THOSE FOR OCTOBER AND NOVEMBER, WHICH ARE FAIR.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 516 FT³/S (14.6 M³/S) MAR. 21, 1975, GAGE HEIGHT, 7.54 FT (2.298 M); MINIMUM, 0.62 FT³/S (0.018 M³/S) FEB. 25, 26, 1975, GAGE HEIGHT, 3.12 FT (0.951 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 515 FT³/S (14.6 M³/S) MAR. 12, GAGE HEIGHT, 8.54 FT (2.603 M); MINIMUM, 0.63 FT³/S (0.018 M³/S) SEPT. 12, 13, 14, GAGE HEIGHT, 3.72 FT (1.134 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CURIC FEET PER SECOND).

OCT. 1 TO NOV. 13				NOV. 14 TO SEPT. 30			
3.1	0.4	3.3	4.6	3.7	0.58	4.7	14
3.2	2.0	3.4	9.3	3.9	1.1	5.0	32
				4.1	1.8	5.5	77
				4.3	2.8	6.0	129
				4.5	5.3	7.0	261
						8.0	423

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.5	2.5	1.2	1.1	7.9	6.1	3.6	1.6	1.1	.82	.81
2	1.5	2.6	2.1	1.3	1.1	4.3	4.4	3.1	1.5	1.1	.81	.79
3	1.2	2.6	1.7	1.1	1.1	3.9	3.8	2.8	1.4	1.0	.79	.78
4	1.4	1.9	1.7	.93	1.0	12	3.4	2.6	1.4	1.0	.76	.76
5	1.3	1.7	1.8	.92	1.0	120	3.1	2.8	1.4	1.0	.83	.74
6	1.0	1.7	1.7	.99	1.0	36	2.8	2.7	1.4	.95	.80	.77
7	1.1	1.7	1.6	1.0	1.0	14	2.8	2.4	1.4	.92	.77	.74
8	1.2	1.7	1.6	.88	1.1	10	2.6	2.2	1.4	.97	.75	.70
9	1.2	2.1	1.6	.82	1.1	18	2.2	2.1	1.3	.98	.70	.70
10	1.5	2.5	1.5	.82	1.7	53	2.4	1.9	1.3	.96	.68	.69
11	1.5	1.8	1.5	1.0	3.5	74	2.9	1.9	1.3	.92	.71	.68
12	1.6	1.7	1.4	1.5	11	349	3.0	1.8	1.2	.91	.68	.68
13	1.7	1.6	1.6	1.8	7.0	44	4.8	1.9	1.2	.93	.68	.63
14	1.9	1.5	2.6	1.5	1.9	36	4.8	1.9	1.4	.94	3.5	.65
15	1.5	1.5	2.0	1.3	17	17	5.2	4.9	1.3	.92	.98	.68
16	1.4	1.5	1.6	1.1	3.0	7.1	3.3	7.9	1.2	.90	.84	.72
17	1.5	1.5	1.3	.97	1.9	4.5	3.1	7.5	1.2	.82	.79	.71
18	1.6	1.5	1.7	.93	4.0	10	2.6	3.7	1.2	.85	.78	.71
19	1.8	1.5	1.3	.96	4.0	15	2.3	3.2	1.2	.86	.75	.91
20	1.9	1.6	1.4	.98	2.5	10	6.4	2.9	1.1	.99	.73	.87
21	2.0	1.6	1.3	1.0	1.3	5.3	41	2.6	1.1	.90	.71	.81
22	2.0	1.3	1.3	1.0	1.7	3.9	25	2.3	1.1	.83	.72	.76
23	2.1	1.3	1.3	1.0	1.6	3.7	9.2	2.2	1.4	.87	.68	.74
24	2.4	1.3	1.3	1.1	1.8	3.7	23	2.0	1.4	.85	.68	.70
25	1.6	1.3	1.3	1.1	2.7	3.4	25	1.9	1.2	.79	4.3	.70
26	1.4	1.2	1.3	1.1	19	4.5	8.6	1.8	1.1	.82	2.4	.73
27	1.5	1.3	1.2	1.0	115	13	5.1	1.8	1.0	.81	1.1	.74
28	1.5	1.3	1.2	1.1	92	5.4	4.3	1.7	1.1	1.4	1.8	.71
29	1.5	5.2	1.2	1.1	33	5.3	3.7	1.7	1.1	.96	.98	.73
30	1.5	7.1	1.2	1.1	---	8.4	3.7	1.7	1.1	.87	.87	.74
31	1.5	---	1.2	1.1	---	7.1	---	1.7	---	.96	.85	---
TOTAL	48.4	58.6	47.5	33.70	335.1	909.4	220.6	85.2	38.0	29.08	33.24	22.08
MEAN	1.56	1.95	1.53	1.09	11.6	29.3	7.35	2.75	1.27	.94	1.07	.74
MAX	2.4	7.1	2.6	1.8	115	349	41	7.9	1.6	1.4	4.3	.91
MTN	1.0	1.2	1.2	.82	1.0	3.4	2.2	1.7	1.0	.79	.68	.63
CFSM	.09	.11	.08	.06	.63	1.60	.40	.15	.07	.05	.06	.04
IN.	.10	.12	.10	.07	.68	1.85	.45	.17	.08	.06	.07	.04
CAL YR 1975	TOTAL	2257.62	MEAN	6.19	MAX	270	MIN	.72	CFSM	.34	IN	4.59
WTR YR 1976	TOTAL	1860.90	MEAN	5.08	MAX	349	MIN	.63	CFSM	.28	IN	3.78

05427948 PHEASANT BRANCH AT MIDDLETON, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1974 TO CURRENT YEAR.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT , 1975										
20...	1045	1.8	710	7.7	10.0	38	7	7.6	68	1.6
NOV										
17...	1345	1.5	765	7.8	8.0	1	6	10.4	92	.8
OEC										
16...	1450	1.7	760	7.5	.5	9	10	12.6	91	1.6
JAN , 1976										
26...	1250	1.2	780	7.4	.5	4	6	9.3	67	.4
FEB										
25...	1300	1.9	780	6.2	.5	9	15	9.8	71	1.3
MAR										
23...	1100	3.6	1030	7.6	4.5	14	9	9.7	78	.7
APR										
28...	1110	4.3	1100	7.4	7.0	21	10	9.1	78	1.0
MAY										
19...	1240	3.2	1050	7.5	12.0	7	6	8.7	84	1.2
JUN										
30...	1130	1.2	800	8.2	17.5	4	6	7.5	82	1.5
JUL										
21...	1100	1.0	750	7.4	20.0	12	7	6.9	79	1.1
SEP										
01...	0845	.81	750	7.7	17.0	20	8	4.6	49	2.0
10...	1330	.68	800	7.9	15.5	--	5	7.9	82	--
27...	--	--	--	--	--	--	--	--	--	--
28...	1200	.71	800	7.6	10.5	10	7	8.5	80	.8

DATE	FECAL COLIFORM (CDL. PFR 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DISSOLVED PHOSPHATE-SILICUM (K) (MG/L)
OCT , 1975										
20...	49	210	450	130	100	48	6.5	3	.1	2.8
NOV										
17...	90	530	450	130	110	43	5.4	3	.1	2.8
OEC										
16...	330	1100	390	83	84	44	8.2	4	.2	2.5
JAN , 1976										
26...	24	92	400	96	96	40	5.2	3	.1	2.2
FEB										
25...	858	300	350	100	84	35	25	13	.6	3.4
MAR										
23...	8130	858	560	300	150	44	5.9	2	.1	3.3
APR										
28...	150	140	610	350	170	45	6.2	2	.1	3.3
MAY										
19...	>1100	150	600	340	170	43	6.2	2	.1	3.4
JUN										
30...	410	1130	450	140	100	49	6.2	3	.1	2.4
JUL										
21...	460	1300	450	150	110	43	5.9	3	.1	2.5
SEP										
01...	2300	1000	450	140	110	42	6.2	3	.1	4.5
10...	--	--	--	--	--	--	--	--	--	--
27...	67	220	--	--	--	--	--	--	--	--
28...	--	--	430	110	100	44	6.1	3	.1	2.5

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

ROCK RIVER BASIN

05427948 PHEASANT BRANCH AT MIDDLETON, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT , 1975										
20...	386	0	317	12	--	100	17	.2	16	517
NOV										
17...	396	0	325	10	--	77	18	.1	16	490
DEC										
16...	376	0	308	19	--	61	19	.2	16	423
JAN , 1976										
26...	376	0	308	24	--	87	14	.2	17	479
FEB										
25...	308	0	253	311	--	76	46	.1	14	450
MAR										
23...	316	0	259	13	--	300	19	.1	16	760
APR										
28...	313	0	257	20	.6	300	19	.2	15	776
MAY										
19...	324	0	266	16	--	290	20	.2	13	771
JUN										
30...	378	0	310	3.8	--	120	16	.1	18	602
JUL										
21...	367	0	301	23	--	150	15	.2	18	580
SEP										
01...	380	0	312	12	--	120	14	.1	18	544
10...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
28...	391	0	321	16	--	110	16	.2	18	509

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FY)	DIS-SOLVED SOLIDS (TONS PER DAY)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT , 1975										
20...	494	.70	2.51	3.0	13	.04	.13	3.0	.80	.06
NOV										
17...	468	.67	1.98	--	--	--	--	--	.49	.08
DEC										
16...	421	.58	1.94	--	--	--	--	--	.67	.09
JAN , 1976										
26...	465	.65	1.55	3.9	17	.04	.13	3.9	.57	.06
FEB										
25...	448	.61	2.31	2.9	13	.04	.13	2.9	.89	.14
MAR										
23...	718	1.03	7.39	5.4	24	.00	.00	5.4	1.5	.10
APR										
28...	746	1.06	9.01	7.3	32	.04	.13	7.3	1.2	.11
MAY										
19...	726	1.05	6.66	4.5	20	.07	.23	4.6	1.0	.10
JUN										
30...	507	.82	1.95	1.9	8.5	.08	.26	2.0	.55	.11
JUL										
21...	537	.79	1.57	2.4	11	.06	.20	2.5	.83	.08
SEP										
01...	509	.74	1.19	1.4	6.0	.05	.16	1.4	.60	.13
10...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
28...	499	.69	.98	2.0	8.7	.04	.13	2.0	.50	.08

05427948 PHEASANT BRANCH AT MIDDLETON, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL B MG/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL A MG/SQ M
OCT , 1975									
20...	.18	30	150	--	7.4	--	--	--	--
NOV									
17...	.25	20	90	--	2.2	--	--	--	--
DEC									
16...	.28	30	220	--	2.4	--	--	--	--
JAN , 1976									
26...	.18	40	230	--	3.5	--	--	--	--
FEB									
25...	.43	30	250	5.0	--	--	--	--	--
MAR									
23...	.31	50	270	--	9.0	--	--	--	--
APR									
26...	.34	40	300	--	8.5	6.00	10.9	.89	17
MAY									
19...	.31	40	280	--	8.6	--	--	--	--
JUN									
30...	.34	40	290	--	5.1	41.2	43.0	--	--
JUL									
21...	.25	40	190	--	4.9	11.5	31.9	4.2	95
SEP									
01...	.40	60	230	--	16	--	--	--	--
10...	--	--	--	--	--	7.85	12.4	5.0	48
27...	--	--	--	--	--	--	--	--	--
28...	.25	60	170	--	4.8	--	--	--	--

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)
APR , 1976									
28...	1110	4.3	2	0	10	1	10	830	40

DATE	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR , 1976								
28...	2	320	300	<.5	1	6	0	20

05427948 PHEASANT BRANCH AT MIDDLETON, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANFOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION
OCT , 1975								
01...	1445	1.5	760	7.5	10.5	6	12.2	115
09...	1230	1.3	845	7.5	12.5	5	7.2	71
17...	1315	1.5	845	7.6	10.0	8	8.7	81
20...	1045	1.8	710	7.7	10.0	7	7.6	68
30...	1320	1.5	780	--	6.0	6	11.0	92
NOV								
06...	1100	1.7	760	7.6	13.0	6	6.6	65
12...	1310	1.7	--	7.7	6.0	25	9.3	78
17...	1345	1.5	765	7.8	8.0	6	10.4	92
24...	1130	1.3	750	7.8	2.0	4	10.4	79
DEC								
04...	1530	1.7	--	7.8	1.0	8	12.0	88
10...	1145	1.5	650	7.8	1.0	5	11.2	82
16...	1450	1.7	760	7.5	.5	10	12.6	91
23...	1345	1.3	775	7.6	.5	6	11.3	82
JAN , 1976								
02...	1350	1.5	750	7.8	1.0	5	11.5	85
09...	1340	.81	870	7.4	1.0	6	7.3	54
15...	1045	1.9	--	7.5	.5	6	10.4	75
23...	1050	1.0	755	7.5	1.0	7	9.1	67
26...	1250	1.2	780	7.4	.5	6	9.3	67
FER								
05...	1450	1.0	745	7.7	.0	7	10.3	74
12...	0845	3.8	400	7.5	.5	20	10.6	77
25...	1300	1.9	780	6.2	.5	15	9.8	71
MAR								
06...	0945	26	460	7.1	.0	4	11.3	81
11...	1300	26	370	--	2.0	65	11.0	83
17...	1345	4.8	930	7.7	2.0	15	9.4	71
23...	1100	3.6	1030	7.6	4.5	9	9.7	78
APR								
01...	1330	5.8	1000	6.5	3.5	--	10.4	82
08...	1325	2.8	1000	7.7	8.0	5	11.8	104
16...	1415	3.1	800	7.6	4.0	25	8.0	81
23...	0815	9.0	960	7.6	8.0	25	9.8	87
28...	1110	4.3	1100	7.4	7.0	10	9.1	78
MAY								
07...	1030	4.0	1100	6.9	9.0	7	9.1	83
13...	1200	1.8	1000	7.5	12.0	8	10.1	98
19...	1240	3.2	1050	7.5	12.0	6	8.7	84
26...	1435	1.8	870	7.3	14.0	--	9.6	97
JUN								
10...	0845	1.3	825	7.6	18.5	6	3.2	36
18...	1205	1.3	830	6.8	18.5	--	4.5	50
23...	1545	1.3	800	7.8	17.0	5	8.1	87
30...	1130	1.2	800	8.2	17.5	6	7.5	82
JUL								
09...	1350	1.0	850	7.6	20.5	--	9.5	110
21...	1100	1.0	750	7.4	20.0	7	6.9	79
29...	1130	.95	730	7.5	20.0	5	4.8	55
AUG								
06...	1340	.79	800	7.7	19.0	--	--	--
11...	1450	.71	750	8.0	21.0	--	12.0	140
17...	1400	.79	740	7.9	17.0	7	9.0	97
SEP								
01...	0845	.81	750	7.7	17.0	8	4.6	49
10...	1330	.68	800	7.9	15.5	5	7.9	82
28...	1200	.71	800	7.6	10.5	7	8.5	80

05427948 PHEASANT BRANCH AT MIDDLETON, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct. 20, 1975	1045	CHRY SOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Cyclotella</i>	81	3	
		<i>Navicula</i>		0	
		<i>Nitzschia</i>	120	4	
		Chrysophyceae			
		<i>Ochromonas</i>		0	
		CYANOPHYTA			
		Myxophyceae			
		<i>Oscillatoria</i>	3,000	94	
		EUGLENOPHYTA			
		Euglenophyceae			
<i>Euglena</i>		0			
TOTAL		3,200			
Jan. 26, 1976	1250	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Chlamydomonas</i>	52	27	
		CHRY SOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>		6	
		<i>Caloneis</i>		0	
		<i>Cyclotella</i>	13	7	
		<i>Cymbella</i>		0	
		<i>Gomphonema</i>	52	27	
		<i>Melosira</i>		0	
		<i>Navicula</i>	26	13	
		<i>Nitzschia</i>	52	27	
		<i>Pinnularia</i>		0	
		<i>Rhoicosphenia</i>		0	
		<i>Surirella</i>		0	
		CYANOPHYTA			
		Myxophyceae			
		<i>Oscillatoria</i>		0	
		TOTAL		200	
Apr. 28, 1976	1110	CHRY SOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Navicula</i>	28	4	
		<i>Nitzschia</i>	280	42	
		<i>Surirella</i>	28	4	
		<i>Synedra</i>	85	13	
		CYANOPHYTA			
		Myxophyceae			
		<i>Oscillatoria</i>	230	33	
		EUGLENOPHYTA			
		Euglenophyceae			
<i>Euglena</i>	28	4			
TOTAL		680			
July 21, 1976	1100	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Chlamydomonas</i>	280	46	
		CHRY SOPHYTA			
		Bacillariophyceae			
		<i>Achnanthes</i>	21	4	
		<i>Gomphonema</i>	21	4	
		<i>Navicula</i>	130	21	
		<i>Nitzschia</i>	130	21	
		EUGLENOPHYTA			
		Euglenophyceae			
<i>Euglena</i>	21	4			
TOTAL		600			

05427948 PHEASANT BRANCH AT MIDDLETON, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT , 1975											
01...	1445	10.5	1.5	28	.11	01...	1335	3.5	5.8	13	.20
09...	1230	12.5	1.3	28	.10	08...	1325	8.0	2.8	16	.12
10...	1440	--	1.5	57	.23	15...	1415	--	10	110	3.0
14...	1540	--	2.8	40	.30	16...	1415	4.0	3.1	26	.22
17...	1315	10.0	1.5	16	.06	20...	2135	--	27	256	.19
20...	1045	10.0	1.8	3	.01	21...	0045	--	35	1640	155
24...	1120	--	2.5	21	.14	21...	0950	9.0	16	266	.11
30...	1320	6.0	1.5	20	.08	21...	1320	9.5	16	131	5.7
NOV											
06...	1100	13.0	1.7	60	.28	21...	1425	9.5	20	172	9.3
12...	1310	6.0	1.7	23	.11	21...	1830	10.0	91	902	222
17...	1345	8.0	1.5	18	.07	21...	2135	--	98	2720	720
24...	1130	2.0	1.3	42	.15	23...	0815	8.0	9.0	40	.97
DEC											
04...	1545	5.5	1.7	17	.08	24...	1800	--	52	469	66
10...	1145	1.0	1.5	9	.04	28...	1110	7.0	4.3	31	.36
16...	1450	.5	1.7	36	.17	MAY					
23...	1345	.5	1.3	32	.11	07...	1030	9.0	4.0	27	.29
JAN , 1976											
02...	1350	1.0	1.5	36	.15	13...	1200	12.0	1.8	66	.32
09...	1340	1.0	1.81	65	.14	19...	1240	12.0	3.2	30	.26
15...	1045	.5	1.9	19	.10	19...	1515	--	3.2	129	1.1
23...	1050	1.0	1.0	36	.10	26...	1435	14.0	1.8	17	.08
26...	1250	.5	1.2	18	.06	JUN					
FEB											
05...	1450	.0	1.0	39	.11	10...	0845	18.5	1.3	55	.19
12...	0845	.5	3.8	41	.42	16...	1205	--	1.2	10	.03
12...	1350	--	7.2	31	.60	23...	1545	17.0	1.3	9	.03
25...	1300	.5	1.9	14	.07	23...	2000	--	2.1	154	.87
27...	1650	--	226	2390	1460	23...	2100	16.5	3.1	41	.34
27...	1905	--	324	2240	1960	30...	1130	17.5	1.2	68	.22
27...	2040	--	238	1630	1050	JUL					
27...	2045	--	225	1650	1000	09...	1350	20.5	1.0	27	.07
28...	0200	--	113	511	156	22...	--	--	E.80	67	E.14
28...	0805	--	45	223	27	28...	0915	--	2.5	27	.18
28...	1135	--	76	425	87	28...	0930	--	2.4	70	.45
28...	1415	--	102	498	137	29...	0830	--	.98	120	.32
28...	1800	1.0	118	634	202	29...	1130	20.0	.95	8	.02
29...	1245	1.0	67	354	64	AUG					
MAR											
04...	1455	.5	4.6	26	.32	06...	1340	19.0	.79	20	.04
04...	1800	.5	9.0	106	2.6	11...	1450	21.0	.71	69	.13
05...	1110	--	80	102	22	14...	1215	19.0	2.6	105	.74
05...	1355	--	219	189	112	14...	1345	19.0	2.3	66	.41
05...	1600	--	132	248	88	17...	1400	17.0	.79	14	.03
06...	0945	.0	26	9	.63	25...	1855	--	28	110	8.5
06...	1455	--	28	81	6.1	25...	1945	--	26	523	37
11...	1300	2.0	26	147	10	25...	1950	--	26	534	37
12...	0830	3.5	413	2480	2770	26...	1115	20.0	1.9	23	.12
12...	1030	3.5	460	2020	2510	28...	0725	--	2.0	52	.28
12...	1240	--	474	1580	2020	SEP					
12...	1455	--	469	1150	1460	01...	0845	17.0	.81	52	.11
12...	1600	--	477	1760	2270	10...	1330	15.5	.68	46	.08
13...	0800	1.0	25	194	13	16...	1215	14.0	.71	25	.05
13...	1550	2.0	42	262	30	23...	1300	12.5	2.2	36	.21
17...	1345	2.0	4.8	24	.31	24...	1415	11.5	.68	66	.12
23...	1100	4.5	3.6	14	.14	28...	1100	9.0	.71	8	.02
						28...	1200	10.5	.71	17	.03

E ESTIMATED.

05427948 PHEASANT BRANCH AT MIDDLETON, WI--CONTINUED

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTAN- TANEDUS DIS- CHARGE (CFS)	SUS- PENDE D SEDI- MENT DIS- CHARGE (MG/L)	SUS- PENDE D SEDI- MENT DIS- CHARGE (T/DAY)	SUS- SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
FEB , 1976							
27...	2045	225	1650	1000	34	48	62
MAR							
12...	0830	413	2480	2770	32	44	60
AUG							
25...	1950	26	534	37	47	65	84

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
FEB , 1976						
27...	77	88	91	94	99	100
MAR						
12...	77	89	93	94	99	100
AUG						
25...	95	99	100	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTAN- TANEDUS DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
OCT , 1975												
20...	1045	1.8	3	5	15	43	50	52	56	61	74	100

ROCK RIVER BASIN

05427950 PHEASANT BRANCH AT MOUTH AT MIDDLETON, WI

LOCATION.--LAT 43°06'22", LONG 89°29'01", IN SE 1/4 SE 1/4 SEC.1, T.7 N., R.8 E., DANE COUNTY, HYDROLOGIC UNIT 07090001, AT NONRECORDING GAGE ON UPSTREAM SIDE OF BRIDGE ON COUNTY TRUNK HIGHWAY M, 500 FT (152 M) UPSTREAM FROM LAKE MENDOTA AT MIDDLETON.

DRAINAGE AREA.--23.1 MI² (59.8 KM²) UPSTREAM FROM GAGING STATION, OF WHICH 1.22 MI² (3.16 KM²) IS NONCONTRIBUTING.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1974 TO CURRENT YEAR.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT , 1975										
20...	0930	5.9	610	8.0	5.0	17	6	9.2	75	1.3
NOV										
17...	1230	6.5	655	7.9	10.0	1	6	13.9	129	1.9
DEC										
16...	1320	5.6	645	7.9	1.5	15	25	13.1	98	1.5
JAN , 1976										
26...	1120	4.5	645	7.7	1.0	2	5	12.9	95	.6
FEB										
25...	1430	9.2	640	6.8	8.5	13	8	11.9	106	1.3
MAR										
23...	1000	7.3	800	8.1	4.5	13	7	10.6	85	1.0
APR										
28...	1315	10	1000	8.1	12.0	17	9	10.6	103	1.3
MAY										
19...	1330	7.8	810	7.9	17.5	7	10	14.5	158	1.6
JUN										
30...	1010	5.1	640	7.9	17.5	3	3	11.4	124	1.2
JUL										
21...	0845	4.0	650	7.4	20.0	7	4	5.6	64	1.0
SEP										
01...	0945	4.4	675	8.1	16.5	9	4	3.2	34	2.3
10...	1300	3.8	690	7.9	15.5	--	3	8.6	89	--
23...	1300	3.4	650	7.8	12.5	3	3	6.4	63	3.1

DATE	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)
OCT , 1975										
20...	110	280	380	75	85	40	6.9	4	.2	2.1
NOV										
17...	842	340	340	30	72	38	6.3	4	.2	2.3
DEC										
16...	46	300	520	210	130	48	7.5	3	.1	4.0
JAN , 1976										
26...	83	835	350	49	76	40	8.5	5	.2	1.9
FEB										
25...	82	400	300	55	66	34	33	19	.8	2.7
MAR										
23...	812	120	450	170	110	42	7.9	4	.2	3.3
APR										
28...	53	829	460	200	120	40	7.9	4	.2	3.3
MAY										
19...	200	52	430	150	110	37	7.2	4	.2	3.1
JUN										
30...	35	78	340	37	69	40	6.6	4	.2	1.2
JUL										
21...	200	180	340	41	72	40	7.4	4	.2	1.8
SEP										
01...	--	2800	340	48	74	38	6.6	4	.2	2.6
10...	--	--	--	--	--	--	--	--	--	--
23...	97	130	350	54	74	39	6.1	4	.1	2.4

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

05427950 PHEASANT BRANCH AT MOUTH AT MIDDLETON, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT , 1975										
20...	368	0	302	5.9	--	42	15	.2	14	395
NOV										
17...	373	0	306	7.5	--	35	16	.1	14	343
DEC										
16...	383	0	314	7.7	--	160	21	.1	18	609
JAN , 1976										
26...	372	0	305	12	--	43	18	.1	16	396
FEB										
25...	305	0	250	77	--	33	56	.0	13	407
MAR										
23...	334	0	274	4.2	--	150	20	.1	14	548
APR										
28...	322	0	264	4.1	.0	190	18	.2	11	588
MAY										
19...	335	0	275	6.7	--	130	19	.2	10	495
JUN										
30...	366	0	300	7.4	--	39	14	.1	13	404
JUL										
21...	370	0	303	24	--	45	15	.1	13	400
SEP										
01...	357	0	293	4.5	--	38	11	.1	16	386
10...	--	--	--	--	--	--	--	--	--	--
23...	355	0	291	9.0	--	28	14	.1	16	366

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED NITRATE PLUS NITRITE (N) (MG/L)	TOTAL KjEL-OAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT , 1975										
20...	401	.54	6.29	3.2	14	.02	.07	3.2	.55	.05
NOV										
17...	368	.47	6.02	--	--	--	--	--	.49	.07
DEC										
16...	578	.83	9.24	--	--	--	--	--	.79	.12
JAN , 1976										
26...	400	.54	4.92	3.0	13	.05	.16	3.0	.36	.05
FEB										
25...	400	.55	10.2	2.7	12	.00	.00	2.7	.80	.12
MAR										
23...	529	.75	10.6	3.7	16	.00	.00	3.7	.94	.11
APR										
28...	572	.80	15.9	5.0	22	.07	.23	5.1	.93	.10
MAY										
19...	495	.67	10.4	2.8	12	.08	.26	2.9	.95	.12
JUN										
30...	369	.55	5.56	1.1	5.0	.08	.26	1.2	.30	.07
JUL										
21...	380	.54	4.32	.40	1.8	.32	1.1	.72	.78	.10
SEP										
01...	368	.53	4.59	.97	4.3	.23	.76	1.2	.65	.10
10...	--	--	--	--	--	--	--	--	--	--
23...	365	.50	3.36	2.2	9.6	.14	.46	2.3	.38	.07

ROCK RIVER BASIN

05427950 PHEASANT BRANCH AT MOUTH AT MIDDLETON, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL B (MG/SQ M)	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL A (MG/SQ M)
OCT , 1975									
20...	.15	10	160	--	1.0	--	--	--	--
NOV									
17...	.21	20	170	--	2.8	--	--	--	--
DEC									
16...	.37	30	190	--	5.2	--	--	--	--
JAN , 1976									
26...	.15	20	100	--	1.6	--	--	--	--
FEB									
25...	.37	30	150	7.7	--	--	--	--	--
MAR									
23...	.34	50	270	--	9.9	--	--	--	--
APR									
26...	.31	30	160	--	8.2	9.31	13.8	.04	1.6
MAY									
19...	.37	50	210	--	7.5	--	--	--	--
JUN									
30...	.21	40	30	--	4.8	53.0	58.0	--	--
JUL									
21...	.31	40	300	--	3.7	2.15	21.5	.46	53
SEP									
01...	.31	70	170	--	12	--	--	--	--
10...	--	--	--	--	--	32.7	38.7	1.2	20
23...	.21	50	70	--	3.4	--	--	--	--

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)
APR , 1976									
26...	1315	10	0	0	<10	1	0	550	30

DATE	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR , 1976								
28...	2	170	160	<.5	1	5	0	0

05427950 PHEASANT BRANCH AT MOUTH AT MIDDLETON, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION
OCT , 1975								
01...	1510	5.0	655	8.2	12.5	7	15.8	155
09...	1300	5.7	655	8.0	13.0	4	16.0	158
17...	1250	5.7	655	8.7	10.0	4	15.6	144
20...	0930	5.9	610	6.0	5.0	6	9.2	75
30...	1230	5.7	640	8.0	6.0	3	13.8	116
NOV								
06...	1210	6.6	620	8.0	13.5	4	14.3	142
12...	1455	6.6	--	8.4	5.0	4	14.3	117
17...	1230	6.5	655	7.9	10.0	6	13.9	129
24...	1240	6.8	600	8.1	3.0	10	12.0	93
DEC								
04...	1445	6.7	--	8.1	5.5	6	13.9	116
10...	1130	5.0	600	7.9	1.0	7	11.6	85
16...	1320	5.6	645	7.9	1.5	25	13.1	96
23...	1315	5.6	650	7.9	2.5	20	11.9	92
JAN , 1976								
02...	1445	5.6	660	8.1	1.0	5	13.7	101
09...	1500	4.6	580	7.7	1.0	9	11.9	87
15...	1145	5.8	--	7.7	1.0	7	11.2	82
23...	1030	5.6	640	7.6	1.0	15	11.0	81
26...	1120	4.5	645	7.7	1.0	5	12.9	95
FEB								
05...	1525	5.0	655	7.6	1.0	15	12.8	94
12...	0930	6.0	630	7.6	2.0	20	10.3	78
25...	1430	9.2	640	6.8	0.5	8	11.9	106
MAR								
06...	1035	7.0	340	7.2	.0	6	11.6	83
11...	1355	175	340	--	2.0	60	10.9	83
17...	1425	9.0	740	7.7	5.0	15	11.8	97
23...	1000	7.3	800	8.1	4.5	7	10.6	85
APR								
01...	1400	10	800	7.2	4.0	--	13.6	109
08...	1400	6.0	650	7.9	12.0	5	13.6	132
16...	1500	8.0	600	7.8	10.0	5	14.2	131
23...	0915	7.4	710	7.5	9.0	30	8.7	79
28...	1315	10	1000	8.1	12.0	9	10.6	103
MAY								
07...	1100	2.0	720	7.3	9.5	5	11.8	108
13...	1240	8.0	850	7.9	9.0	20	12.1	110
19...	1330	7.8	810	7.9	17.5	10	14.5	158
26...	1410	7.0	680	7.1	20.0	--	15.6	179
JUN								
10...	0930	6.0	680	7.4	18.5	2	5.1	57
18...	1255	5.5	650	7.3	20.0	2	12.2	140
23...	1455	8.0	560	8.7	22.0	2	17.0	202
30...	1010	5.1	640	7.9	17.5	3	11.4	124
JUL								
09...	1310	4.5	590	8.0	25.0	2	12.4	155
21...	0845	4.0	650	7.4	20.0	4	5.6	64
29...	1030	3.5	630	7.4	19.5	2	5.0	57
AUG								
06...	1420	4.0	610	8.0	23.0	5	--	--
11...	1530	3.8	600	8.1	27.5	4	17.0	224
17...	1330	3.9	650	7.6	19.0	6	8.8	99
26...	1045	4.0	500	7.3	19.0	6	4.2	47
SEP								
01...	0945	4.4	675	8.1	16.5	4	3.2	34
10...	1300	3.8	690	7.9	15.5	3	8.6	89
16...	1325	3.8	560	7.9	14.5	4	6.5	66
23...	1300	3.4	650	7.8	12.5	3	6.4	63
28...	1100	3.3	650	7.2	10.0	3	5.8	54

ROCK RIVER BASIN

05427950 PHEASANT BRANCH AT MOUTH AT MIDDLETON, WI--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct. 20, 1975	0930	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	1,300	42	
		<i>Amphora</i>		0	
		<i>Anomoeoneis</i>		0	
		<i>Cocconeis</i>		0	
		<i>Fragilaria</i>		0	
		<i>Gomphonema</i>		0	
		<i>Melosira</i>		0	
		<i>Navicula</i>	700	23	
		<i>Nitzschia</i>	1,000	32	
		EUGLENOPHYTA			
		Euglenophyceae			
		<i>Euglena</i>	100	3	
TOTAL	3,100				
Jan. 26, 1976	1120	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Achnanthes</i>	310	15	
		<i>Amphora</i>		0	
		<i>Caloneis</i>		0	
		<i>Cocconeis</i>	77	4	
		<i>Cymatopleura</i>	77	4	
		<i>Cymbella</i>	150	8	
		<i>Gomphonema</i>	150	8	
		<i>Melosira</i>	77	4	
		<i>Navicula</i>	700	35	
		<i>Nitzschia</i>	150	8	
		<i>Synedra</i>	310	15	
		TOTAL	2,000		
Apr. 28, 1976	1315	CHRYSOPHYTA			Grab sample
		Bacillariophyceae			
		<i>Amphora</i>	490	4	
		<i>Cymatopleura</i>		0	
		<i>Cymbella</i>		0	
		<i>Fragilaria</i>	410	4	
		<i>Gomphonema</i>	82	1	
		<i>Gyrosigma</i>	82	1	
		<i>Navicula</i>	1,100	10	
		<i>Nitzschia</i>	1,100	10	
		<i>Pinnularia</i>	82	1	
		<i>Synedra</i>	330	3	
		CYANOPHYTA			
		Myxophyceae			
<i>Oscillatoria</i>	7,300	66			
EUGLENOPHYTA					
Euglenophyceae					
<i>Euglena</i>	82	1			
TOTAL	11,000				
July 21, 1976	0845	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		<i>Chlamydomonas</i>	39	3	
		<i>Scenedesmus</i>	120	10	
		CHRYSOPHYTA			
		Bacillariophyceae			
		<i>Cocconeis</i>	39	3	
		<i>Cyclotella</i>	39	3	
		<i>Cymbella</i>	39	3	
		<i>Gomphonema</i>	39	3	
		<i>Melosira</i>	39	3	
		<i>Navicula</i>	270	23	
		<i>Nitzschia</i>	430	37	
		<i>Pinnularia</i>	39	3	
<i>Synedra</i>	78	7			
TOTAL	1,200				

05427950 PHEASANT BRANCH AT MOUTH AT MIDDLETON, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)							
OCT , 1975						APR , 1976												
01...	1510	12.5	5.0	20	.27	01...	1400	4.0	10	43	1.2							
09...	1300	13.0	5.7	26	.40	08...	1400	12.0	8.0	17	.37							
17...	1250	10.0	5.7	10	.15	16...	1500	10.0	8.0	9	.19							
20...	0930	5.0	5.9	6	.10	20...	2200	--	40	74	8.0							
NOV						MAY												
06...	1210	13.5	6.6	23	.41	21...	1005	--	32	166	14							
12...	1455	5.0	6.6	8	.14	21...	1450	--	28	180	14							
17...	1230	10.0	6.5	16	.28	21...	1800	--	45	136	17							
24...	1040	--	6.8	76	1.4	23...	0915	9.0	74	33	6.6							
DEC						JUN												
04...	1445	5.5	6.7	23	.42	07...	1100	9.5	2.0	11	.06							
10...	1130	1.0	5.0	16	.22	13...	1240	9.0	8.0	80	1.7							
16...	1320	1.5	5.6	67	1.0	19...	1330	17.5	7.8	28	.59							
23...	1315	2.5	5.6	58	.88	26...	1400	--	7.0	39	.74							
FEB , 1976						JUL												
05...	1525	1.0	5.0	66	.89	10...	0930	18.5	6.0	29	.47							
12...	0940	--	12	34	1.1	18...	1255	20.0	5.5	4	.06							
25...	1430	8.5	9.2	13	.33	23...	1455	22.0	8.0	1	.02							
27...	1710	--	390	329	346	23...	2030	21.0	5.0	12	.16							
27...	1835	--	410	732	810	30...	1010	17.5	5.1	39	.54							
27...	2015	--	420	1360	1540	AUG												
28...	0935	--	161	234	102	06...	1420	23.0	4.0	15	.16							
28...	1440	--	150	163	66	11...	1530	27.5	3.8	41	.42							
28...	1735	--	170	158	73	14...	1230	19.0	3.9	64	.67							
29...	0015	--	190	231	119	17...	1330	19.0	3.9	28	.29							
MAR						SEP												
05...	1205	--	160	54	23	01...	1100	--	5.0	42	.57							
05...	1430	--	120	45	15	10...	1300	15.5	3.8	16	.16							
06...	1035	.0	70	19	3.6	16...	1325	14.5	3.8	8	.08							
06...	1515	--	40	21	2.3	23...	1300	12.5	3.4	36	.33							
11...	1355	2.0	175	64	30	28...	1100	10.0	3.3	47	.42							
12...	1120	--	180	1030	501	PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT												
13...	0835	--	60	315	51	DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
13...	1530	--	70	207	39	MAR , 1976												
17...	1425	5.0	9.0	15	.36	12...	1120	180	1030	501	53	71	86	95	97	98	98	100
23...	1000	4.5	7.3	3	.06	AUG	25...	2030	42	150	17	36	45	57	68	84	92	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM
OCT , 1975									
20...	0930	5.9	62	83	95	97	99	99	100
JUL , 1976									
21...	0845	4.0	38	54	70	83	94	99	99

ROCK RIVER BASIN

05427965 SPRING HARBOR STORM SEWER AT MADISON, WI

LOCATION.--LAT 43°04'45", LONG 89°28'15", IN NW 1/4 SE 1/4 SEC.18, T.7 N., R.9 E., DANE COUNTY, HYDROLOGIC UNIT 07090001, IN CITY PARK NEAR THE JUNCTION OF SPRING HARBOR DR. AND UNIVERSITY AVE. IN MADISON.

DRAINAGE AREA.--3.29 MI² (8.52 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--FEBRUARY TO SEPTEMBER 1976.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 855.3 FT (260.70 M), ABOVE MEAN SEA LEVEL.

REMARKS.--RECORDS ARE GOOD.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE DURING PERIOD FEBRUARY TO SEPTEMBER 1976, 169 FT³/S (4.79 M³/S) MAR. 4. GAGE HEIGHT, 2.24 FT (0.683 M); NO FLOW ON MANY DAYS.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).

0.41	0	0.9	12
0.5	0.55	1.0	18
0.6	1.8	1.1	26
0.7	3.8	1.2	33
0.8	6.7	1.3	42

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---	0	.23	.23	.12	.14	.03	.11
2					---	1.7	.12	.08	.12	.10	.06	.01
3					---	.50	.11	.06	.12	.11	.04	.02
4					---	42	.10	.11	.12	.09	.06	.04
5					---	20	.11	1.4	.12	.10	.38	.06
6					---	3.0	.05	.20	.12	.11	.08	.06
7					---	6.7	0	.12	.18	.12	.05	.09
8					---	4.1	0	.11	.24	.12	.08	.09
9					---	9.2	.06	.09	.30	.12	.10	.15
10					---	7.0	1.4	.42	.27	.12	.12	.05
11					---	3.5	.37	.16	.23	.12	.12	.06
12					---	40	.18	.24	.28	.08	.12	.06
13					---	.65	.12	.73	1.9	.08	.20	.06
14					---	.57	.11	.19	1.9	.12	9.6	.12
15					---	.04	13	15	.25	.12	.06	.12
16					---	0	.26	9.6	.18	.12	.03	.06
17					---	.01	.93	.64	.16	.10	.06	.06
18					---	.25	.99	.13	.42	.14	.09	.05
19					---	.57	.12	.11	.20	.14	.12	1.7
20					---	.35	16	.34	.18	.32	.14	.13
21					---	.06	23	.13	.18	.13	.14	.04
22					---	0	.57	.15	.18	.12	.12	.02
23					---	1.0	.01	.78	.27	7.4	.14	.15
24					---	3.4	0	14	.11	.79	.11	.18
25					---	8.6	.02	2.3	.07	.40	.12	5.9
26					---	15	7.5	.22	.07	.21	.16	.29
27					---	39	2.4	.12	.06	.18	.10	2.5
28					---	2.5	.05	.07	.06	.24	4.2	2.5
29					---	.04	1.9	.38	.06	.15	.14	0
30					---	---	3.1	.65	.06	.28	1.1	.04
31					---	---	1.6	---	.06	---	.55	.06
TOTAL					---	156.78	76.35	31.06	17.42	9.34	23.42	3.18
MEAN					---	5.06	2.55	1.00	.58	.30	.76	.11
MAX					---	42	23	15	7.4	4.2	9.6	1.7
MIN					---	0	0	.06	.12	.08	0	0
CFSH					---	1.54	.78	.30	.18	.09	.23	.63
IN.					---	1.77	.86	.35	.20	.11	.26	.04

05427965 SPRING HARBOR STORM SEWER AT MADISON, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--FEBRUARY TO SEPTEMBER 1976.

WATER QUALITY DATA, FEBRUARY TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
MAR , 1976				
11...	1445	9.2	32	.81
APR				
15...	1228	58	4420	699
15...	1245	42	5830	667
15...	1300	33	3020	269
15...	1320	93	2020	512
15...	1340	136	4060	1490
15...	1403	99	6470	1740
15...	1427	55	2430	362
JUN				
13...	0015	1.6	268	1.2
13...	0025	5.8	288	4.5
13...	0045	3.0	25	.20
13...	0125	1.2	535	1.8
13...	0145	11	414	13
13...	0225	3.8	122	1.3
13...	2220	6.1	131	2.2
13...	2250	6.1	169	2.8
13...	2310	14	220	8.6
13...	2340	19	148	7.7
13...	2400	23	251	16
14...	0030	21	150	8.6
23...	1650	6.1	514	8.5
23...	1710	6.1	463	7.7
23...	1720	28	855	67
23...	1910	49	16	2.2
JUL				
20...	0705	3.4	540	5.0
30...	2135	5.8	72	1.1
30...	2215	3.0	77	.62
30...	2225	14	66	2.5
30...	2304	14	63	2.4
30...	2345	10	31	.88
AUG				
27...	2205	.17	380	.17
27...	2215	20	750	42
27...	2235	13	232	8.1
27...	2305	6.5	561	9.9
27...	2355	38	116	12
28...	0130	5.8	95	1.5
28...	0230	4.9	29	.39
SEP				
19...	1320	10	9	.26

ROCK RIVER BASIN

05427970 WILLOW CREEK AT MADISON, WI

LOCATION.--LAT 43°04'27", LONG 89°25'21", IN NW 1/4 NW 1/4 SEC.22, T.7 N., R.9 E., DANE COUNTY, HYDROLOGIC UNIT 07090001, ON LEFT BANK 800 FT (244 M) UPSTREAM FROM OBSERVATORY DRIVE ON THE UNIVERSITY OF WISCONSIN CAMPUS, 200 FT (61 M) DOWNSTREAM FROM STORM SEWER OUTLET AND 0.3 MI (0.5 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--3.14 MI² (8.13 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--OCTOBER 1973 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER, PARSHALL FLUME AND CONCRETE CONTROL. DATUM OF GAGE IS 847.8 FT (258.4 M) ABOVE MEAN SEA LEVEL, UNADJUSTED.

REMARKS.--RECORDS ARE GOOD EXCEPT THOSE FOR PERIODS OF BACKWATER FROM LAKE MENDOTA AND DISCHARGES BELOW 2.0 FT³/S (0.06 M³/S), WHICH ARE FAIR.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 1,600 FT³/S (45.3 M³/S) AUG. 16, 1974, GAGE HEIGHT, 6.22 FT (1.896 M); NO FLOW FOR PART OF FEB. 27 AND MAR. 1, 1974.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 766 FT³/S (21.7 M³/S) AUG. 14, GAGE HEIGHT, 5.54 FT (1.689 M); MINIMUM DAILY, 0.27 FT³/S (0.008 M³/S) MAY 23.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY BACKWATER FROM LAKE MENDOTA MAR. 15 TO APR. 9, APR. 23-27.)

2.52	0	3.0	7.7
2.6	0.8	3.2	15
2.7	1.9	3.4	25
2.8	3.2	3.6	40

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.67	.72	.79	.71	.74	1.0	2.0	.52	1.0	.84	.45	1.3
2	.60	8.1	.58	.86	.90	2.0	1.6	.45	1.0	1.0	.81	.97
3	.92	4.5	.65	.77	.99	1.4	1.5	.56	1.0	.86	.99	1.5
4	.74	.71	.70	.55	1.1	38	1.3	.99	1.1	.61	1.1	1.0
5	.85	.71	.78	.63	1.2	10	1.2	2.5	.97	.85	1.7	.62
6	1.1	.71	.70	.77	1.1	3.4	1.1	.62	.89	1.3	.92	.70
7	1.1	1.5	.60	.73	1.0	5.5	1.0	.56	1.3	1.4	.88	.87
8	1.4	.56	.78	.79	1.3	3.2	.94	.51	1.4	1.5	.66	1.2
9	.97	6.4	.78	.85	1.7	5.1	.90	.35	1.4	1.6	1.0	1.2
10	1.1	1.3	.75	.72	4.5	4.1	7.1	.86	1.4	1.5	1.3	.92
11	.51	.56	.80	.60	1.7	3.1	1.2	.68	1.7	1.4	1.4	1.1
12	1.0	.63	.70	.90	4.0	24	.82	.73	1.5	1.5	1.5	.88
13	1.2	.54	1.5	.82	1.5	1.7	.68	1.6	5.5	1.7	1.4	1.2
14	2.4	.53	2.4	.84	.90	1.5	.78	.68	2.8	1.9	17	1.4
15	.76	.35	.59	.74	6.6	1.4	7.2	19	1.3	1.8	.28	1.1
16	.68	.31	.69	.73	4.0	1.3	.92	13	1.1	1.5	.57	.76
17	.75	.61	.69	.47	3.5	1.2	1.5	.92	1.3	1.2	.60	.60
18	.44	.66	.72	.57	10	1.1	1.7	.55	1.8	1.1	1.3	.34
19	.31	.66	.68	.86	3.0	1.0	.62	.47	.96	1.6	1.6	3.9
20	.51	1.9	.59	.78	3.8	1.4	20	1.1	.97	2.3	1.5	.54
21	.70	1.8	.52	.83	1.9	1.2	17	.75	1.4	1.5	1.3	.42
22	.77	.36	.60	.89	1.6	1.1	1.1	.39	1.5	1.5	1.1	.60
23	.81	.30	.71	.85	2.2	1.0	1.6	.27	13	1.7	1.6	.50
24	5.9	.49	.63	.81	6.1	.94	12	.55	1.5	1.4	1.6	.70
25	.56	.60	.50	.70	8.5	.90	1.5	.64	1.1	1.3	6.3	1.0
26	.44	.58	.67	.86	9.8	12	1.2	.73	.99	1.9	1.2	.51
27	.73	.45	.89	.97	11	1.5	.90	1.0	.93	1.7	5.3	.76
28	.90	.51	.54	1.0	2.8	1.1	.75	1.1	1.4	9.7	2.8	.60
29	.85	13	.69	1.0	2.0	2.0	.79	.82	1.4	1.2	.42	.79
30	.83	1.5	.81	.99	---	5.0	1.5	.80	1.1	3.5	.84	.82
31	.84	---	.92	.85	---	2.5	---	.74	---	1.2	1.2	---
TOTAL	31.34	51.55	23.95	24.44	99.43	140.64	92.40	54.44	54.71	54.06	60.62	28.80
MEAN	1.01	1.72	.77	.79	3.43	4.54	3.08	1.76	1.82	1.74	1.96	.56
MAX	5.9	13	2.4	1.0	11	38	20	19	13	9.7	17	3.9
MIN	.31	.30	.50	.47	.74	.90	.62	.27	.89	.61	.28	.34
CFSM	.32	.55	.25	.25	1.09	1.45	.98	.56	.58	.55	.62	.31
IN.	.37	.61	.28	.29	1.18	1.67	1.09	.64	.65	.64	.72	.34

CAL YR 1975 TOTAL 1052.82 MEAN 2.88 MAX 87 MIN .30 CFSM .92 IN 12.47
WTR YR 1976 TOTAL 716.38 MEAN 1.96 MAX 38 MIN .27 CFSM .62 IN 8.48

05427970 WILLOW CREEK AT MADISON, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1973 TO CURRENT YEAR.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: OCTOBER 1974 TO CURRENT YEAR.

INSTRUMENTATION.--SEDIMENT PUMPING SAMPLER SINCE OCTOBER 1, 1974.

REMARKS.--SEDIMENT RECORDS ARE GOOD. MEAN SUSPENDED-SEDIMENT CONCENTRATIONS FOR MORE THAN 20 PERCENT OF THE YEAR ARE ESTIMATED.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 273 MG/L JULY 3, 1975; MINIMUM DAILY MEAN, 1 MG/L ON SEVERAL DAYS. MAXIMUM OBSERVED, 2,210 MG/L APR. 28, 1975; MINIMUM OBSERVED, 1 MG/L ON SEVERAL DAYS.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 291 TONS (264 TONNES) JUNE 24, 1975; MINIMUM DAILY, 0 TON (0 TONNE) ON SEVERAL DAYS.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--A SUSPENDED-SEDIMENT CONCENTRATION OF 2,830 MG/L WAS OBSERVED ON MAR. 14, 1973.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: MAXIMUM DAILY MEAN, 236 MG/L JAN. 31; MINIMUM DAILY MEAN, 1 MG/L JUNE 2, 6, JULY 16, 17, 24, SEPT. 2, 8. MAXIMUM OBSERVED, 1,600 MG/L FEB. 15; MINIMUM OBSERVED, 1 MG/L ON SEVERAL DAYS.

SUSPENDED-SEDIMENT DISCHARGE: MAXIMUM DAILY, 38 TONS (34 TONNES) MAR. 4; MINIMUM DAILY, 0 TON (0 TONNE) ON SEVERAL DAYS.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
FEB , 1976											
25...	1545	27	500	6.3	2.5	--	60	10.7	82	R1600	--
MAR											
23...	1230	1.3	550	7.8	10.5	--	2	7.2	68	<1	--
MAY											
13...	1400	1.2	460	8.5	14.5	45	90	5.5	56	3600	13000
19...	1015	.50	710	8.3	13.5	--	15	4.0	40	R190	--
JUN											
29...	1045	1.4	750	8.0	21.0	--	3	3.7	43	B69	--
JUL											
21...	0845	.91	690	7.7	21.5	--	--	2.9	34	4900	--
SEP											
01...	0900	1.9	600	7.6	22.5	--	--	3.1	37	--	--

DATE	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)
FEB , 1976											
25...	57	0	15	4.8	--	--	--	--	70	0	57
MAR											
23...	350	25	74	40	--	--	--	--	396	0	325
MAY											
13...	180	0	40	20	36	30	1.2	3.9	234	0	192
19...	330	0	72	36	--	--	--	--	456	0	374
JUN											
29...	330	0	68	38	--	--	--	--	426	0	349
JUL											
21...	310	0	61	38	--	--	--	--	401	0	329
SEP											
01...	300	13	61	36	--	--	--	--	351	0	288

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

ROCK RIVER BASIN

05427970 WILLOW CREEK AT MADISON, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NITRATE (N) (MG/L)
FEB , 1976										
25...	56	--	11	97	--	240	--	.33	18.0	.55
MAR										
23...	10	--	28	32	--	411	--	.56	1.44	.03
MAY										
13...	1.2	.0	26	30	9.0	313	280	.43	10.1	.56
19...	3.7	--	27	20	--	473	--	.64	.64	.00
JUN										
29...	6.8	--	22	30	--	438	--	.60	1.66	.80
JUL										
21...	13	--	24	34	--	425	--	.58	1.04	.85
SEP										
01...	14	--	22	18	--	378	--	.51	1.94	.22

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
FEB , 1976										
25...	.04	.59	.19	1.3	1.5	2.1	9.3	.68	.58	27
MAR										
23...	.00	.03	.14	1.4	1.5	1.5	6.8	.66	.71	15
MAY										
13...	.40	.96	.02	2.9	2.9	3.9	17	1.2	1.0	45
19...	.01	.01	.00	1.2	1.2	1.2	5.4	.43	.51	58
JUN										
29...	1.0	1.8	.19	1.1	1.3	3.1	14	.24	.19	17
JUL										
21...	.85	1.7	.04	.36	.40	2.1	9.3	.15	.13	4.3
SEP										
01...	.52	.74	.07	.91	.98	1.7	7.6	.15	.10	18

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL CORALIT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)
MAY , 1976								
13...	1400	12	1	0	10	2	20	2600

DATE	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY , 1976							
13...	280	130	<.5	12	5	0	180

05427970 WILLOW CREEK AT MADISON, WI--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT (T/DAY)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
NOV . 1975						
03...	0930	50	76	10		91
MAR . 1976						
12...	0313	50	12	1.6		97
12...	0430	61	14	2.3		95
12...	0645	43	5	.58		98
12...	1830	28	2	.15		99
MAY						
15...	1645	38	291	30		78
16...	1720	5.4	455	6.6		78
JUN						
13...	0115	29	335	26		93
23...	1755	179	948	458		68
SFP						
19...	1305	13	68	2.4		83

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM
OCT . 1975								
14...	1450	20	--	--	8	15	30	52
NOV								
03...	0930	50	76	10	26	39	53	71

DATE	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 2.00 MM
OCT . 1975							
14...	83	87	94	98	99	100	--
NOV							
03...	87	91	93	97	99	99	100

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8	.01	6	.01	7	.01	42	.08	199	.40	27	.23
2	11	.02	16	.80	5	.01	33	.08	51	.12	38	.35
3	11	.03	30	.77	5	.01	70	.14	25	.07	21	.08
4	9	.02	15	.03	6	.01	124	.18	16	.05	71	18
5	6	.01	16	.03	6	.01	42	.07	11	.03	57	1.5
6	10	.03	9	.02	7	.01	38	.08	10	.03	54	1.7
7	17	.05	28	.30	7	.01	69	.14	10	.03	119	5.6
8	10	.05	26	.05	8	.02	70	.15	41	.19	49	1.1
9	8	.02	31	1.3	8	.02	66	.15	47	.26	41	1.2
10	13	.05	15	.07	9	.02	62	.12	153	4.5	57	1.3
11	16	.02	10	.02	10	.02	59	.10	110	.50	32	.45
12	9	.03	9	.02	14	.03	55	.13	107	1.8	198	18
13	8	.02	9	.01	39	.18	52	.12	104	.42	37	.18
14	43	.99	8	.01	160	3.0	49	.11	12	.03	12	.05
15	10	.02	7	.01	95	.15	46	.09	117	8.7	8	.03
16	10	.02	5	0	43	.08	44	.09	59	1.6	6	.02
17	10	.02	4	.01	105	.20	41	.05	70	.90	5	.02
18	9	.01	4	.01	168	.33	39	.06	103	4.2	5	.01
19	8	.01	5	.01	57	.11	37	.08	37	.52	4	.01
20	8	.01	27	.27	60	.09	34	.07	36	1.4	3	.01
21	8	.02	11	.06	56	.08	32	.07	48	.27	3	.01
22	8	.02	4	0	46	.08	31	.07	44	.23	2	.01
23	11	.03	3	0	59	.11	29	.07	46	.34	2	.01
24	91	6.0	3	0	37	.06	27	.06	58	1.7	8	.02
25	12	.02	3	0	51	.07	26	.05	50	2.4	22	.05
26	10	.01	3	0	65	.12	35	.08	45	2.4	78	17
27	10	.02	3	0	53	.13	231	.60	67	3.7	12	.05
28	10	.02	3	0	51	.07	173	.45	16	.10	8	.02
29	10	.02	114	8.7	63	.12	139	.38	9	.07	19	.39
30	10	.02	14	.07	36	.08	167	.44	---	---	86	4.8
31	10	.02	---	---	31	.08	236	.54	---	---	77	.52
MONTH	---	7.64	---	12.58	---	5.32	---	4.90	---	36.96	---	72.72

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	26	.14	25	.04	2	.01	5	.01	22	.03	26	.10
2	19	.08	10	.01	1	0	9	.02	4	.01	52	.14
3	15	.06	10	.02	2	.01	6	.01	4	.01	36	.14
4	13	.05	13	.05	4	.01	8	.01	5	.01	13	.03
5	10	.03	47	1.5	5	.01	12	.03	13	.07	19	.03
6	14	.04	23	.04	1	0	2	.01	4	.01	11	.02
7	39	.11	11	.02	3	.01	3	.01	5	.01	2	0
8	11	.03	10	.02	2	.01	5	.02	4	.01	1	0
9	9	.02	9	.01	5	.02	5	.02	3	.01	3	.01
10	35	3.5	11	.03	9	.03	3	.01	8	.03	19	.05
11	40	.12	17	.03	5	.02	2	.01	5	.02	31	.09
12	27	.06	8	.02	9	.04	6	.03	6	.02	8	.02
13	13	.02	26	.32	77	4.7	3	.01	7	.03	5	.02
14	18	.04	6	.01	11	.27	4	.02	51	22	5	.02
15	141	11	68	11	8	.03	3	.02	8	.01	7	.02
16	7	.02	30	4.1	19	.06	1	0	5	.01	8	.02
17	29	.35	12	.03	11	.03	1	0	13	.02	6	.01
18	27	.37	15	.02	14	.11	4	.01	6	.02	13	.01
19	15	.02	25	.04	8	.02	7	.04	2	.01	28	.76
20	84	16	70	.18	5	.01	16	.16	2	.01	6	.01
21	112	17	18	.03	5	.02	7	.02	8	.03	10	.01
22	51	.16	15	.02	3	.01	3	.01	4	.01	11	.02
23	48	.68	10	.01	117	14	3	.02	10	.04	10	.01
24	41	2.7	11	.02	113	.62	1	.01	3	.01	9	.01
25	17	.22	15	.03	58	.14	3	.01	35	5.5	8	.02
26	11	.06	21	.04	15	.04	16	.12	10	.03	7	.01
27	12	.03	22	.06	11	.03	---	---	15	2.3	7	.01
28	9	.02	8	.02	9	.03	2	.01	7	.15	6	.01
29	9	.02	4	.01	8	.03	4	.01	2	0	6	.01
30	110	.62	2	0	8	.02	16	.85	2	.01	5	.01
31	---	---	7	.01	---	---	29	.10	8	.03	---	---
MONTH	---	53.57	---	17.74	---	20.34	---	1.61	---	30.46	---	1.62

TOTAL LOAD FOR YEAR: 265.46 TONS.

ROCK RIVER BASIN

413

05428000 LAKE MENDOTA AT MADISON, WI

LOCATION.--LAT 43°05'42", LONG 89°22'12", IN SE 1/4 SEC.12, T.7 N., R.9 E., DANE COUNTY, HYDROLOGIC UNIT 07090001, ATTACHED TO LEFT WALL OF LOCK OF DAM AT OUTLET, IN MADISON.

DRAINAGE AREA.--233 MI² (603 KM²). AREA OF LAKE MENDOTA, 15.2 MI² (39.4 KM²).

PERIOD OF RECORD.--DECEMBER 1902 TO MAY 1903, JANUARY 1916 TO CURRENT YEAR (INCOMPLETE).

REVISED RECORDS.--WDR 73-1: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 847.82 FT (258.416 M) ABOVE MEAN SEA LEVEL, OR 2.22 FT (0.677 M) ABOVE CITY OF MADISON DATUM. PRIOR TO NOV. 15, 1971, NONRECORDING GAGE AT SAME SITE AND DATUM.

REMARKS.--LAKE LEVEL REGULATED BY CONCRETE DAM WITH TWO 12-FOOT GATES AND 20-FDDT LOCK AT OUTLET.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM GAGE HEIGHT OBSERVED, 4.19 FT (1.277 M) APR. 5, 1959; MINIMUM OBSERVED, 0.20 FT (0.061 M) FEB. 24 TO MAR. 10, 1920.

EXTREMES FOR CURRENT YEAR.--MAXIMUM GAGE HEIGHT, 3.07 FT (0.936 M) MAR. 26; MINIMUM, 0.68 FT (0.207 M) SEPT. 30.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.26	1.22	1.25	.85	.94	1.52	2.91	2.54	2.02	1.60	.99	.95
2	1.23	1.25	1.24	.86	---	1.57	2.87	2.52	1.99	1.58	.97	.93
3	1.21	1.31	1.21	.84	---	1.58	2.83	2.46	1.97	1.56	.95	.91
4	1.21	1.33	1.19	.83	---	1.65	2.80	2.39	1.94	1.54	.92	.91
5	1.19	1.33	1.18	.81	1.00	1.81	2.75	2.37	1.92	1.52	.91	.89
6	1.19	1.34	1.15	.84	.98	1.90	2.70	2.36	1.91	1.50	.90	.87
7	1.19	1.33	1.10	.85	.97	1.96	2.67	2.32	1.90	1.48	.89	.85
8	1.20	1.35	1.08	.85	.96	2.01	2.61	2.29	1.89	1.45	.88	.86
9	1.20	1.37	1.06	.84	.96	2.02	2.56	2.25	1.87	1.41	.86	.87
10	1.21	1.45	1.01	.85	.97	2.03	2.54	2.22	1.84	1.40	.85	.82
11	1.20	1.37	.99	.85	.97	2.04	2.53	2.18	1.82	1.38	.85	.81
12	1.19	1.40	.95	.87	.98	2.18	2.49	2.16	1.80	1.33	.85	.79
13	1.21	1.41	.93	.94	.98	2.45	2.46	2.15	1.80	1.30	.84	.77
14	1.22	1.33	.94	.89	.98	2.64	2.42	2.14	1.82	1.29	.93	.77
15	1.25	1.32	.93	.86	1.00	2.76	2.43	2.17	1.81	1.26	.92	.77
16	1.23	1.31	.91	.87	1.04	2.82	2.44	2.27	1.77	1.23	.91	.75
17	1.23	1.31	.88	.88	1.09	2.84	2.42	2.31	1.73	1.18	.90	.75
18	1.22	1.30	---	.88	1.14	2.84	2.43	2.29	1.73	1.15	.89	.75
19	1.22	1.30	.82	.88	1.16	2.84	2.41	2.29	1.71	1.11	.89	.76
20	1.22	1.30	.83	.88	1.18	2.91	2.42	2.27	1.69	1.11	.89	.79
21	1.23	1.36	.83	.88	1.25	2.98	2.55	2.26	1.67	1.09	.88	.78
22	1.23	1.31	.84	.89	1.25	3.02	2.63	2.23	1.66	1.06	.88	.75
23	1.24	1.29	.84	.87	1.25	3.00	2.63	2.21	1.65	1.06	.87	.74
24	1.26	1.29	.84	.91	1.25	2.98	2.66	2.19	1.69	1.04	.86	.72
25	1.31	1.27	.84	.91	1.24	2.95	2.73	2.17	1.68	1.01	.87	.72
26	1.28	1.25	.84	.93	1.25	2.94	2.70	2.14	1.67	.99	.96	.71
27	1.27	1.25	.84	.94	1.29	2.99	2.66	2.11	1.65	.96	.98	.71
28	1.28	1.21	.84	.93	1.37	2.95	2.63	2.09	1.66	.99	1.03	.71
29	1.26	1.22	.84	.93	1.45	2.95	2.59	2.08	1.64	1.00	.99	.70
30	1.23	1.32	.84	.94	---	2.95	2.56	2.06	1.63	.99	.96	.70
31	1.21	---	.85	.94	---	2.93	---	2.04	---	1.02	.96	---
MEAN	1.23	1.31	---	.88	---	2.48	2.60	2.24	1.78	1.24	.91	.79
MAX	1.31	1.45	---	.94	---	3.02	2.91	2.54	2.02	1.60	1.03	.95
MIN	1.19	1.21	---	.81	---	1.52	2.41	2.04	1.63	.96	.84	.70

ROCK RIVER BASIN

05428600 WEST BRANCH STARKWEATHER CREEK AT MADISON, WI

LOCATION.--LAT 43°05'58", LONG 89°20'18", IN SE 1/4 NW 1/4 SEC.5, T.7N., R.10E., DANE COUNTY, HYDROLOGIC UNIT 07090001, AT NONRECORDING GAGE AT BRIDGE ON MILWAUKEE STREET.

DRAINAGE AREA.--12.1 MI² (33.3 KM²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--FEBRUARY TO SEPTEMBER 1976.

WATER QUALITY DATA, FEBRUARY TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
FEB , 1976				
10...	1700	4.0	72	.78
12...	1815	10	21	.57
17...	1045	4.7	12	.15
24...	1400	8.6	295	6.8
24...	1755	9.0	66	1.6
25...	1530	19	47	2.4
25...	2045	34	47	4.3
MAR				
04...	1320	5.0	148	2.0
04...	1540	21	77	4.4
04...	2040	114	153	47
05...	0050	114	122	38
05...	1025	93	64	16
11...	1415	10	58	1.6
12...	0830	55	163	24
12...	1230	78	407	86
12...	2104	96	44	12
13...	0940	45	178	22
13...	1100	40	144	16
13...	1625	26	78	5.5
APR				
20...	2030	45	57	6.9
20...	2130	45	54	6.6
21...	0715	28	33	2.5
21...	1405	62	130	22
21...	1435	59	277	44
21...	1505	59	120	19
21...	1935	70	64	12
22...	0020	62	72	12
22...	0600	48	244	32
AUG				
27...	2320	.30	32	.03

ROCK RIVER BASIN

415

05428650 EAST BRANCH STARKWEATHER CREEK AT MADISON, WI

LOCATION.--LAT 43° 05' 57" N, LONG 89° 19' 54" W, IN SW 1/4 NE 1/4 SEC. 5, T. 7N., R. 10E., DANE COUNTY, HYDROLOGIC UNIT 07090001, AT NONRECORDING GAGE AT BRIDGE ON MILWAUKEE STREET.

DRAINAGE AREA.--8.89 MI² (23.03 KM²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--FEBRUARY TO SEPTEMBER 1976.

WATER QUALITY DATA, FEBRUARY TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
FEB , 1976				
10...	1640	5.0	137	1.8
17...	0945	4.0	175	1.9
24...	1345	6.0	51	.83
24...	1710	16	122	5.3
25...	1520	28	354	27
25...	2035	36	169	16
26...	1630	36	326	32
MAR				
04...	1315	31	25	2.1
04...	1525	45	195	24
04...	2030	102	463	133
05...	0045	106	184	53
05...	1015	86	24	5.6
11...	1425	6.5	23	.40
12...	0820	28	412	31
12...	1220	23	327	20
12...	2115	31	132	11
13...	0935	12	89	2.9
13...	1110	9.7	89	2.3
13...	1615	9.2	51	1.3
APR				
20...	2020	41	377	42
20...	2145	39	218	23
21...	0710	26	16	1.2
21...	1400	35	30	2.8
21...	1430	40	71	7.7
21...	1500	42	82	9.3
21...	1925	49	118	16
22...	0010	40	38	4.1
22...	0555	36	25	2.4

ROCK RIVER BASIN

05428665 OLBRICH PARK STORM DITCH AT MADISON, WI

LOCATION.--LAT 43°05'24", LONG 89°19'28", IN NW 1/4 NW 1/4 SEC.9, T.7 N., R.10 E., DANE COUNTY, HYDROLOGIC UNIT 07090001, ON LEFT BANK AT ENTRANCE TO CULVERT, ON DENNETT DRIVE, IN MADISON.

DRAINAGE AREA.--2.36 MI² (6.11 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--MARCH TO SEPTEMBER 1976.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 860 FT (262 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS GOOD EXCEPT THOSE BELOW 0.5 FT³/S (0.014 M³/S) WHICH ARE POOR. ADDITIONAL DISCHARGE INFORMATION FOR WARNER PARK STORM DITCH IN MADISON IS AVAILABLE IN THE DISTRICT OFFICE.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE DURING PERIOD MARCH TO SEPTEMBER 1976, 154 FT³/S (4.36 M³/S) MAR. 4, GAGE HEIGHT, 6.67 FT (2.033 M); MINIMUM, NO FLOW FOR PARTS OF SEVERAL DAYS.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						5.8	.75	.18	.18	.08	.14	.08
2						1.8	.50	.17	.14	.10	.10	.02
3						.95	.30	.14	.14	.10	.10	.03
4						30	.22	.10	.14	.10	.10	.02
5						7.9	.26	.67	.14	.10	.10	.02
6						6.4	.10	.18	.14	.10	.22	.02
7						3.8	.30	.14	.18	.10	.18	.02
8						11	.14	.08	.14	.10	.18	.05
9						1.2	.18	.07	.14	.10	.22	.05
10						.75	1.6	.22	.10	.10	.22	.02
11						.66	.85	.22	.10	.10	.22	.03
12						9.4	.60	.22	.18	.10	.22	.03
13						1.8	.30	.50	.70	.10	.26	.03
14						.70	.20	.26	.46	.10	2.7	.05
15						.42	1.3	5.4	.14	.10	.14	.05
16						.38	.90	2.8	.14	.10	.10	.03
17						1.7	.50	1.4	.14	.10	.10	.05
18						.48	1.2	.80	.26	.10	.10	.05
19						.46	.46	.65	.14	.26	.10	.95
20						.60	5.0	.80	.14	.42	.14	.08
21						.46	9.4	.38	.10	.14	.18	.02
22						.44	2.2	.26	.10	.08	.26	.02
23						.44	1.1	.26	1.6	.08	.38	.18
24						.42	4.1	.22	.38	.08	.55	.08
25						.30	1.9	.18	.26	.08	1.3	.10
26						3.6	.85	.18	.14	.08	.22	.10
27						2.4	.22	.14	.08	.08	.46	.10
28						.90	.25	.14	.22	2.8	.55	.10
29						.90	.38	.14	.08	.14	.05	.18
30						.91	.63	.38	.14	1.1	.03	.18
31						.95	---	.22	---	.46	.07	---
TOTAL						97.92	36.69	17.50	6.94	7.58	9.69	2.74
MEAN						3.16	1.22	.56	.23	.24	.31	.091
MAX						30	9.4	5.4	1.6	2.8	2.7	.95
MIN						.30	.10	.07	.08	.08	.03	.02
CFSM						1.34	.52	.24	.10	.10	.13	.04
IN.						1.54	.58	.28	.11	.12	.15	.04

05428665 OLBRICH PARK STORM DITCH AT MADISON, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--FEBRUARY TO SEPTEMBER 1976.

WATER QUALITY DATA, FEBRUARY TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Feb. 24, 1976	1530	4.5	4.77	540	Mar. 4, 1976	1525	-	28.7	560
Feb. 25, 1976	1810	2.0	19.2	390					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
FEB. 1976				
10...	1600	3.6	149	1.5
24...	1300	4.0	224	2.4

ROCK RIVER BASIN

05429000 LAKE MONONA AT MADISON, WI

LOCATION.--LAT 43°03'48" LONG 89°23'49" IN SW 1/4 SEC.23, T.7 N., R.9 E., DANE COUNTY, HYDROLOGIC UNIT 07090001, AT END OF CONCRETE STORM SEWER IN BRITTINGHAM PARK, IN MADISON.

DRAINAGE AREA.--279 MI² (723 KM²). AREA OF LAKE MONONA, 5.3 MI² (13.7 KM²).

PERIOD OF RECORD.--SEPTEMBER 1915 TO CURRENT YEAR (FRAGMENTARY) IN REPORTS OF THE GEOLOGICAL SURVY. FOR 1856 TO MARCH 1917 IN REPORTS OF WISCONSIN RAILROAD COMMISSION, VOLUME 19.

REVISED RECORDS.--WSP 1338: LAKE AREA. WRD WI-73-1: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 843.61 FT (257.132 M) ABOVE MEAN SEA LEVEL, OR 1.99 FT (0.606 M) BELOW CITY OF MADISON DATUM. PRIOR TO NOV. 15, 1971, NONRECORDING GAGE AT SAME SITE AND DATUM.

REMARKS.--LAKE LEVEL REGULATED BY CONCRETE DAM WITH FOUR 12-FOOT STOP-LOG SECTIONS AND 12-FOOT LOCK AT OUTLET OF LAKE WAUBESA.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM GAGE HEIGHT OBSERVED, 3.66 FT (1.116 M) JULY 28, 1929; MINIMUM OBSERVED, -0.39 FT (-0.119 M) JAN. 20, 1965.

EXTREMES FOR CURRENT YEAR.--MAXIMUM GAGE HEIGHT, 2.05 FT (0.625 M) APR. 25; MINIMUM, 0.03 FT (0.009 M) FEB. 9-13.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.94	.48	1.22	.62	.11	.78	1.80	1.86	1.53	1.70	1.67	1.25
2	.91	.53	1.23	.60	.10	.83	1.80	1.79	1.54	1.71	1.64	1.23
3	.88	.60	1.23	.55	.09	.85	1.80	1.74	1.55	1.72	1.60	1.20
4	.86	.64	1.22	.54	.09	.95	1.77	1.71	1.57	1.71	1.58	1.18
5	.84	.66	1.23	.52	.07	1.25	1.75	1.69	1.58	1.72	1.56	1.17
6	.81	.68	1.22	.48	.06	1.33	1.73	1.68	1.59	1.71	1.53	1.16
7	.78	.71	1.22	.46	.06	1.36	1.72	1.63	1.60	1.72	1.49	1.14
8	.76	.73	1.22	.44	.04	1.39	1.69	1.59	1.62	1.73	1.47	1.13
9	.73	.78	1.22	.41	.04	1.39	1.67	1.56	1.63	1.73	1.46	1.09
10	.70	.78	1.22	.39	.03	1.38	1.64	1.54	1.65	1.72	1.44	1.06
11	.68	.82	1.23	.37	.03	1.38	1.67	1.52	1.67	1.71	1.41	1.05
12	.67	.81	1.23	.36	.03	1.45	1.62	1.47	1.69	1.70	1.39	1.05
13	.66	.79	1.24	.32	.04	1.53	1.60	1.44	1.71	1.70	1.38	1.04
14	.65	.82	1.27	.30	.06	1.53	1.58	1.41	1.75	1.69	1.47	1.02
15	.63	.84	1.26	.29	.11	1.51	1.59	1.45	1.73	1.68	1.42	1.00
16	.61	.86	1.23	.28	.15	1.48	1.61	1.57	1.71	1.66	1.40	.99
17	.60	.88	1.21	.26	.21	1.45	1.60	1.60	1.73	1.64	1.38	.98
18	.56	.91	1.17	.25	.27	1.44	1.58	1.58	1.73	1.65	1.37	.98
19	.53	.93	1.14	.23	.32	1.45	1.56	1.57	1.70	1.65	1.35	1.00
20	.51	.98	1.10	.22	.35	1.45	1.57	1.56	1.70	1.67	1.33	1.01
21	.50	1.00	1.06	.21	.46	1.44	1.75	1.56	1.70	1.68	1.32	.98
22	.49	1.00	1.02	.19	.50	1.44	1.88	1.55	1.70	1.67	1.31	.98
23	.48	1.03	.98	.18	.52	1.47	1.90	1.54	1.72	1.67	1.30	.96
24	.49	1.04	.95	.17	.54	1.49	1.94	1.51	1.76	1.67	1.28	.95
25	.46	1.04	.90	.16	.56	1.51	2.02	1.49	1.73	1.67	1.28	.95
26	.45	1.06	.85	.16	.61	1.55	1.99	1.49	1.73	1.65	1.32	.95
27	.44	1.09	.80	.16	.68	1.67	1.97	1.50	1.73	1.66	1.30	.95
28	.43	1.11	.76	.15	.74	1.72	1.95	1.52	1.72	1.72	1.31	.93
29	.43	1.16	.73	.13	.76	1.76	1.92	1.51	1.72	1.72	1.29	.93
30	.46	1.22	.69	.12	---	1.80	1.88	1.52	1.72	1.70	1.28	.93
31	.48	---	.65	.12	---	1.80	---	1.52	---	1.71	1.26	---
MEAN	.63	.87	1.09	.31	.26	1.41	1.75	1.57	1.67	1.69	1.41	1.04
MAX	.94	1.22	1.27	.62	.76	1.86	2.02	1.86	1.76	1.73	1.67	1.25
MIN	.43	.40	.65	.12	.03	.78	1.56	1.41	1.53	1.64	1.26	.93

WTR YR 1976 MEAN 1.14 MAX 2.02 MIN .03

05429040 MANITOU WAY STORM SEWER AT MADISON, WI

LOCATION.--LAT 43°02'41", LONG 89°26'24", IN NW 1/4 NW 1/4 SEC.33, T.7 N., R.9 E., DANE COUNTY, HYDROLOGIC UNIT 07090001, AT INFLT TO STORM SEWER ON MANITOU WAY NEAR INTERSECTION WITH MANDAN CRESCENT, IN MADISON.

DRAINAGE AREA.--0.22 MI² (0.57 KM²).

PERIOD OF RECORD.--OCTOBER 1970 TO CURRENT YEAR.

REVISED RECORDS.--WDR WI-73-1: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 840 FT (256 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS FAIR. DISCHARGE AT MORE FREQUENT INTERVALS IS AVAILABLE IN THE DISTRICT OFFICE.

AVERAGE DISCHARGE.--6 YEARS, 0.10 FT³/S (0.0028 M³/S), 6.17 IN/YR (157 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 10.9 FT³/S (3.06 M³/S) JULY 3, 1975, GAGE HEIGHT, 13.79 FT (4.203 M); NO FLOW MANY DAYS IN 1971-76.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE RECORDED, 36 FT³/S (1.02 M³/S) JUNE 23, GAGE HEIGHT, 12.20 FT (3.719 M); STAGE ON AUG. 14, POSSIBLY HIGHER, NO RECORDER RECORD; NO FLOW MANY DAYS DURING THE YEAR.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.05		0	0	.23	4.1	0	0	.05	.03
2	0	.16	.05		0	.22	0	2.4	0	0	.05	0
3	.0	.15	.03		0	.03	0	.16	0	0	.05	0
4	0	.05	.03		0	1.9	0	0	0	0	.05	0
5	0	.03	.03		0	.46	0	.08	0	0	.05	0
6	0	.03	.03		0	.20	0	0	0	0	0	0
7	.21	.05	.03		0	.27	0	0	0	0	0	0
8	0	.05	.03		.03	.14	0	0	0	0	0	0
9	0	.35	0		.05	.28	0	0	0	0	0	0
10	0	.08	.03		.20	.25	.36	0	0	0	0	0
11	0	.05	.03		.05	.20	0	0	0	0	0	0
12	0	.05	.03		.25	1.4	0	0	.03	0	0	0
13	0	.05	.00		.03	.00	0	.08	.37	0	0	0
14	.03	.05	.16		0	.05	0	0	.05	0	.20	0
15	0	.05	.03		.41	0	.20	1.0	0	0	0	0
16	0	.05	.03		.20	0	0	.57	0	0	0	0
17	0	.04	.03		.16	0	.11	.03	0	0	0	0
18	0	.03	0		.60	.05	.05	.03	0	0	0	0
19	0	.03	0		.11	.05	0	.03	0	0	0	.18
20	0	.11	0		.20	.03	1.1	.03	0	0	0	0
21	0	.11	0		.06	0	.70	0	0	0	0	0
22	0	0	0		.08	0	.05	0	0	0	0	0
23	0	0	0		.11	0	.11	0	.68	0	0	0
24	.32	0	0		.30	0	.78	0	.03	0	0	0
25	0	0	0		.45	0	.05	0	0	.03	.19	0
26	0	0	0		.51	.75	.03	0	0	.05	0	0
27	0	0	0		.56	.05	0	0	0	0	.28	0
28	0	0	0		.06	0	0	0	0	.47	.08	0
29	0	.76	0		.03	.21	2.5	0	0	.08	0	0
30	0	.08	0		---	.20	4.3	6	0	.22	0	0
31	0	---	0		---	.19	---	0	---	.05	0	---
TOTAL	.56	2.43	.70	0	4.51	7.01	10.65	8.51	1.16	.90	1.00	.21
MEAN	.018	.081	.023	0	.16	.23	.36	.27	.039	.029	.032	.007
MAX	.32	.76	.16	0	.60	1.9	4.3	4.1	.60	.47	.28	.18
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CFSM	.08	.37	.10	0	.73	1.05	1.64	1.23	.16	.13	.15	.03
IN.	.09	.41	.12	0	.76	1.18	1.79	1.43	.20	.15	.17	.04

CAL YR 1975 TOTAL 72.88 MEAN .20 MAX 5.0 MIN 0 CFSM .91 IN 12.27
WTR YR 1976 TOTAL 37.64 MEAN .10 MAX 4.3 MIN 0 CFSM .45 IN 6.34

NOTE.--FLOW FROM APR. 29 TO MAY 2 IS LARGELY DUE TO CITY WELL BEING DISCHARGED INTO STORM SEWER.

ROCK RIVER BASIN

05429050 NAKOMA STORM SEWER AT MADISON, WI

LOCATION.--LAT 43°02'55", LONG 89°26'16", IN SE 1/4 SW 1/4 SEC.28, T.7 N., R.9 E., DANE COUNTY, HYDROLOGIC UNIT 070900018, NEAR THE JUNCTION OF MANITOU WAY AND NAKOMA ROAD, IN THE UNIVERSITY OF WISCONSIN ARBORETUM, IN MADISON.

DRAINAGE AREA.--2.35 MI² (6.09 KM²).

PERIOD OF RECORD.--DECEMBER 1971 TO CURRENT YEAR.

REVISED RECORDS.--WOR WI-73-1: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 865 FT (264 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS FAIR. DISCHARGE AT MORE FREQUENT INTERVALS IS AVAILABLE IN THE DISTRICT OFFICE.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 189 FT³/S (5.32 M³/S) FEB. 23, 1972, GAGE HEIGHT, 14.6 FT (4.45 M); NO FLOW MANY DAYS 1972-76.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 72 FT³/S (2.04 M³/S) AUG. 14, GAGE HEIGHT, 12.96 FT (3.950 M); NO FLOW MANY DAYS DURING THE YEAR.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	DCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT
1	.60	0	.12	.04	0	1.8	1.3	.35	.01	.03	0	.11
2	.50	1.4	.12	.04	0	2.2	.78	.18	.01	.03	0	0
3	.50	1.0	.15	.03	0	1.1	.17	.20	.01	.01	0	0
4	.40	.33	.16	.02	0	14	.16	.40	.01	.01	0	0
5	.40	.44	.16	0	0	15	.12	1.4	.01	.01	0	0
6	.80	.42	.16	0	0	7.5	.08	.06	.01	.01	0	0
7	.90	.43	.16	0	.10	6.1	.05	.06	.01	.01	0	0
8	.80	.27	.16	0	.40	4.7	.04	.06	.01	.01	0	0
9	.50	1.8	.14	0	1.6	4.0	.10	.02	.01	.04	0	0
10	.30	.94	.14	0	2.0	3.6	2.0	.09	0	.03	0	0
11	.24	.17	.14	0	.42	2.5	.60	0	0	0	0	0
12	.20	.11	.14	0	2.3	10	.20	.04	0	0	0	0
13	.18	.05	.40	0	.30	6.5	.14	.27	1.0	0	0	0
14	1.0	.04	.60	0	.05	4.6	.14	.04	.23	0	2.1	0
15	.40	.07	.15	0	3.2	2.0	.72	4.0	0	0	0	0
16	.30	.17	.14	0	1.9	1.1	.18	4.8	0	0	0	0
17	.20	.19	.13	0	2.0	.69	.52	2.9	0	0	0	0
18	.12	.19	.12	0	5.8	.53	.48	2.4	.01	0	0	0
19	.09	.19	.12	0	3.1	.26	.29	1.6	0	0	0	.50
20	.08	.44	.12	0	2.1	.31	5.0	.77	0	.01	0	0
21	.12	.41	.11	0	2.3	.18	7.8	.32	0	0	0	0
22	.14	.25	.10	0	1.5	.09	4.4	.19	0	0	0	0
23	.16	.22	.10	0	1.3	.08	2.9	.15	2.0	0	0	0
24	2.4	.19	.09	0	2.4	.10	5.0	.12	.24	0	0	0
25	.24	.17	.08	0	4.3	.04	3.5	.08	.13	0	.48	0
26	.12	.11	.08	0	6.9	5.0	2.4	.06	.06	0	0	0
27	.06	.04	.07	0	9.5	2.0	1.8	.04	.04	0	.77	0
28	0	.05	.05	0	6.7	1.2	1.7	.04	.04	1.1	.45	0
29	0	3.2	.04	0	4.4	.82	1.5	.04	.01	0	0	0
30	0	1.0	.04	0	---	.80	.84	.04	.06	.40	0	0
31	0	---	.04	0	---	1.1	---	.02	---	.03	0	---
TOTAL	11.75	14.29	4.33	.13	64.57	99.90	44.91	20.74	3.91	1.73	3.80	.61
MEAN	.38	.48	.14	.004	2.23	3.22	1.50	.67	.13	.056	.12	.020
MAX	2.4	3.2	.60	.04	9.5	15	7.8	4.8	2.0	1.1	2.1	.50
MIN	0	0	.04	0	0	.04	.04	0	0	0	0	0
CFSM	.16	.20	.06	.001	.95	1.37	.64	.29	.06	.02	.05	.008
IN.	.19	.23	.07	.002	1.02	1.58	.71	.33	.06	.03	.06	.010

CAL YR 1975 TOTAL 454.87 MEAN 1.25 MAX 25 MIN 0 CFSM .53 IN 7.20
WTR YR 1976 TOTAL 270.67 MEAN .74 MAX 15 MIN 0 CFSM .31 IN 4.28

ROCK RIVER BASIN

421

05429118 LAKE WINGRA AT MADISON, WI

LOCATION.--LAT 43°03'28", LONG 89°24'22", IN NE 1/4 NE 1/4 SEC.27, T.7 N., R.9 E., DANE COUNTY, HYDROLOGIC UNIT 07090001, ON RIGHT BANK AT OUTLET OF LAKE WINGRA IN MADISON.

DRAINAGE AREA.--6.08 MI² (15.7 KM²).

PERIOD OF RECORD.--APRIL 1970 TO CURRENT YEAR (FRAGMENTARY).

GAGE.--WATER-STAGE RECORDER FROM MAY 25, 1970. DATUM OF GAGE IS 846.8 FT (258.10 M) ABOVE MEAN SEA LEVEL AND 1.2 FT (0.37 M) ABOVE CITY OF MADISON DATUM.

REMARKS.--LAKE LEVEL REGULATED BY CONCRETE CONTROL STRUCTURE.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM GAGE HEIGHT, 2.28 FT (0.695 M) MAR. 7, 1973; MINIMUM, 0.47 FT (0.143 M) SEPT. 1, 1970.

EXTREMES FOR CURRENT YEAR.--MAXIMUM GAGE HEIGHT, 2.07 FT (0.631 M) MAR. 5; MINIMUM, 1.12 FT (0.341 M) SEPT. 15-18.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.48	1.47	1.66	1.50	1.48	1.74	1.69	1.75	1.50	1.42	1.27	1.22
2	1.47	1.50	1.62	1.50	1.47	1.76	1.68	1.72	1.48	1.41	1.25	1.22
3	1.47	1.56	1.60	1.50	1.47	1.73	1.66	1.68	1.48	1.41	1.25	1.23
4	1.46	1.58	1.59	1.49	1.47	1.80	1.64	1.66	1.47	1.40	1.24	1.21
5	1.47	1.57	1.59	1.49	1.46	2.06	1.63	1.62	1.46	1.39	1.24	1.19
6	1.46	1.57	1.58	1.49	1.46	2.02	1.62	1.57	1.45	1.40	1.21	1.19
7	1.46	1.57	1.57	1.49	1.46	1.95	1.59	1.56	1.46	1.39	1.21	1.19
8	1.45	1.58	1.57	1.48	1.47	1.90	1.57	1.55	1.46	1.39	1.21	1.18
9	1.46	1.59	1.56	1.48	1.46	1.86	1.57	1.56	1.45	1.38	1.21	1.18
10	1.46	1.63	1.55	1.48	1.47	1.82	1.56	1.54	1.44	1.38	1.21	1.16
11	1.45	1.59	1.55	1.48	1.46	1.78	1.58	1.52	1.43	1.36	1.21	1.16
12	1.45	1.61	1.54	1.48	1.47	1.85	1.58	1.51	1.43	1.33	1.20	1.15
13	1.47	1.57	1.53	1.48	1.49	1.86	1.58	1.51	1.43	1.32	1.20	1.14
14	1.47	1.55	1.58	1.47	1.50	1.84	1.59	1.53	1.46	1.32	1.26	1.14
15	1.47	1.55	1.58	1.47	1.51	1.79	1.60	1.55	1.46	1.30	1.24	1.12
16	1.45	1.55	1.57	1.48	1.56	1.74	1.62	1.70	1.42	1.28	1.24	1.12
17	1.44	1.55	1.53	1.47	1.59	1.70	1.62	1.77	1.41	1.26	1.24	1.12
18	1.43	1.55	1.52	1.47	1.65	1.68	1.61	1.75	1.41	1.25	1.24	1.13
19	1.43	1.55	1.52	1.47	1.66	1.67	1.59	1.71	1.40	1.25	1.24	1.15
20	1.44	1.57	1.53	1.47	1.66	1.68	1.60	1.68	1.39	1.25	1.24	1.17
21	1.45	1.57	1.52	1.48	1.71	1.65	1.79	1.64	1.39	1.24	1.22	1.17
22	1.45	1.56	---	1.47	1.71	1.63	1.91	1.61	1.39	1.23	1.22	1.17
23	1.47	1.54	---	1.47	1.68	1.63	1.87	1.58	1.41	1.24	1.21	1.15
24	1.48	1.54	---	1.48	1.66	1.64	1.85	1.56	1.45	1.24	1.21	1.16
25	1.49	1.54	---	1.48	1.66	1.62	1.91	1.55	1.48	1.22	1.21	1.15
26	1.48	1.53	---	1.48	1.69	1.63	1.89	1.54	1.47	1.22	1.24	1.15
27	1.48	1.56	1.51	1.48	1.74	1.73	1.84	1.52	1.45	1.22	1.25	1.16
28	1.47	1.56	1.51	1.48	1.78	1.71	1.80	1.51	1.45	1.26	1.26	1.16
29	1.46	1.59	1.50	1.48	1.76	1.71	1.77	1.50	1.44	1.26	1.24	1.17
30	1.46	1.73	1.51	1.48	---	1.74	1.76	1.50	1.43	1.26	1.24	1.18
31	1.48	---	1.50	1.48	---	1.72	---	1.50	---	1.27	1.24	---
MEAN	1.46	1.57	---	1.48	1.57	1.76	1.69	1.60	1.44	1.31	1.23	1.17
MAX	1.49	1.73	---	1.50	1.78	2.06	1.91	1.77	1.50	1.42	1.27	1.23
MIN	1.43	1.47	---	1.47	1.46	1.62	1.56	1.50	1.39	1.22	1.20	1.12

ROCK RIVER BASIN

05429120 LAKE WINGRA OUTLET AT MADISON, WI

LOCATION.--LAT 43°03'28", LONG 89°26'22", IN NE 1/4 NE 1/4 SEC.27, T.7 N., R.9 E., DANE COUNTY, HYDROLOGIC UNIT 07090001, AT OUTLET OF LAKE WINGRA IN MADISON.

DRAINAGE AREA.--6.09 MI² (15.7 KM²).

PERIOD OF RECORD.--OCTOBER 1970 TO CURRENT YEAR.

REVISED RECORDS.--WDR WI-75-1: 1973(M).

GAGE.--WATER-STAGE RECORDER AND SHARP-CRESTED WEIR. DATUM OF GAGE IS 846.58 FT (258.038 M) ABOVE MEAN SEA LEVEL AND 0.98 FT (0.299 M) ABOVE CITY OF MADISON DATUM.

REMARKS.--RECORDS FAIR. WATER FROM LAKE WINGRA LAGOONS BYPASSES GAGE THROUGH A 30-INCH STORM SEWER.

AVERAGE DISCHARGE.--6 YEARS, 4.21 FT³/S (0.119 M³/S), 9.40 IN/YR (239 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 45 FT³/S (1.27 M³/S) MAR. 7, 1973, GAGE HEIGHT, 1.62 FT (0.494 M) OBSERVED READING; NO FLOW MANY DAYS IN 1971-76.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 27 FT³/S (0.76 M³/S) MAR. 5, GAGE HEIGHT, 1.44 FT (0.439 M); NO FLOW JULY 7, JULY 11 TO AUG. 13, AUG. 15 TO SEPT. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.7	7.8	2.8	3.7	12	9.9	12	2.8	.26	0	0
2	1.5	2.8	7.2	3.0	3.2	13	9.4	11	1.6	.16	0	0
3	1.6	5.1	6.3	2.8	3.2	12	8.4	9.4	1.4	.10	0	0
4	1.4	5.2	5.9	2.5	2.9	15	7.8	8.4	1.1	.07	0	0
5	1.6	4.5	5.9	2.6	3.0	26	7.3	6.9	.88	.05	0	0
6	1.2	4.1	5.3	2.8	3.1	24	6.9	5.5	.84	.04	0	0
7	1.3	3.8	5.0	2.8	3.4	22	5.7	4.5	.93	.02	0	0
8	1.4	1.9	4.9	2.6	3.3	20	4.9	4.4	.87	0	0	0
9	1.5	3.8	4.9	2.6	3.3	18	4.9	4.1	.70	.02	0	0
10	1.5	6.8	4.7	2.6	3.5	16	4.6	3.7	.68	.01	0	0
11	1.3	4.7	4.4	2.8	3.3	14	5.3	3.0	.44	0	0	0
12	1.5	4.4	4.3	2.8	3.5	18	5.3	2.7	.42	0	0	0
13	1.9	2.7	4.6	2.8	3.7	19	5.3	2.7	.70	0	0	0
14	2.0	2.3	5.8	2.6	3.5	17	5.7	2.8	1.2	0	.07	0
15	2.1	3.1	5.3	2.8	5.1	15	6.0	3.5	1.4	0	0	0
16	1.5	3.7	5.0	2.9	6.0	13	6.9	7.4	.28	0	0	0
17	1.1	3.5	3.7	2.7	7.0	11	6.9	11	.10	0	0	0
18	.97	3.8	2.7	2.6	9.4	10	6.4	9.0	.10	0	0	0
19	1.2	3.8	3.8	2.9	10	9.8	5.7	9.3	.06	0	0	0
20	1.4	4.5	3.6	2.9	9.5	10	6.0	8.3	.03	0	0	0
21	1.4	3.5	3.2	3.1	12	6.9	14	6.9	.02	0	0	0
22	1.6	2.9	3.2	3.0	11	6.7	20	5.8	.02	0	0	0
23	1.9	2.7	3.0	3.2	10	6.9	18	4.6	.42	0	0	0
24	2.8	2.6	2.9	3.1	9.5	7.8	17	3.8	1.5	0	0	0
25	2.9	2.6	3.0	3.2	9.6	6.9	20	3.4	1.5	0	0	0
26	2.3	2.6	3.0	3.5	11	7.3	19	3.8	1.2	0	0	0
27	2.2	3.3	2.9	3.2	13	12	16	4.5	.87	0	0	0
28	2.0	3.1	2.8	3.5	14	11	14	4.1	.91	0	0	0
29	1.6	4.9	2.8	3.6	13	11	13	3.9	.59	0	0	0
30	1.7	10	3.0	3.6	---	12	13	4.0	.44	0	0	0
31	1.8	---	3.0	3.6	---	11	---	4.0	---	0	0	---
TOTAL	51.87	114.4	133.9	91.5	196.7	414.3	293.3	178.4	24.00	.73	.07	0
MEAN	1.67	3.81	4.32	2.95	6.78	13.4	9.78	5.75	.80	.024	.002	0
MAX	2.9	10	7.8	3.6	14	26	20	12	2.8	.26	.07	0
MIN	.97	1.7	2.7	2.5	2.9	6.7	4.6	2.7	.02	0	0	0
CFSM	.27	.63	.71	.49	1.12	2.20	1.61	.95	.13	.003	0	0
IN.	.32	.70	.82	.56	1.20	2.53	1.79	1.09	.15	.004	.0004	0
CAL YR 1975	TOTAL	2182.13	MEAN 5.98	MAX 42	MIN .97	CFSM .98	IN 13.35					
WTR YR 1976	TOTAL	1499.17	MEAN 4.10	MAX 26	MIN 0	CFSM .67	IN 9.17					

05429500 YAHARA RIVER NEAR MCFARLAND, WI

LOCATION.--LAT 43°00'32", LONG 89°18'18", IN SW 1/4 SEC.3, T.6 N., R.10 E., DANE COUNTY, HYDROLOGIC UNIT 07090001, ON LEFT BANK JUST UPSTREAM FROM BRIDGE ON U.S. HIGHWAY 51, AT DAM AT OUTLET OF LAKE WAUBESA AND 1.0 MI (1.6 KM) SOUTHWEST OF MCFARLAND.

DRAINAGE AREA.--327 MI² (847 KM²).

PERIOD OF RECORD.--SEPTEMBER 1930 TO CURRENT YEAR.

REVISED RECORDS.--WSP 805, WDR WI-73-1; DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 840.40 FT (256.154 M) ABOVE MEAN SEA LEVEL (LEVELS BY WISCONSIN DEPARTMENT OF NATURAL RESOURCES). PRIOR TO DEC. 23, 1934, NONRECORDING GAGE AT SAME SITE AND DATUM.

REMARKS.--RECORDS FAIR. FLOW REGULATED BY DAMS AT OUTLETS OF LAKE MENDOTA AND LAKE WAUBESA. THE MADISON METROPOLITAN SEWERAGE DISTRICT DIVERTED AN AVERAGE OF 33.62 MGD (1.47 M³/S) OF EFFLUENT INTO THE BADFISH CREEK BASIN DURING 1976. PRIOR TO 1958 THE EFFLUENT WAS DISCHARGED INTO THE YAHARA RIVER ABOVE MC FARLAND.

AVERAGE DISCHARGE.--46 YEARS, 152 FT³/S (4.305 M³/S), 6.31 IN/YR (160 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 867 FT³/S (24.6 M³/S) APR. 10, 1959, GAGE HEIGHT, 5.02 FT (1.774 M); MAXIMUM GAGE HEIGHT, 6.33 FT (1.929 M) JULY 23, 24, 1950, BACKWATER FROM AQUATIC VEGETATION; MINIMUM DISCHARGE, 1.0 FT³/S (0.028 M³/S) OCT. 18, 1964.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 451 FT³/S (12.8 M³/S) MAR. 31, GAGE HEIGHT, 4.52 FT (1.378 M); MAXIMUM GAGE HEIGHT, 4.70 FT (1.433 M) APR. 25, BACKWATER FROM AQUATIC VEGETATION; MINIMUM DAILY DISCHARGE, 9.5 FT³/S (0.27 M³/S) SEPT. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	28	243	177	105	228	448	393	153	120	72	51
2	145	32	228	171	106	252	443	383	69	130	68	47
3	145	39	262	170	101	262	436	371	64	126	63	42
4	138	40	263	173	98	283	434	353	62	125	60	40
5	138	37	281	159	97	364	426	343	55	136	57	41
6	133	45	278	153	96	377	421	339	50	129	56	39
7	131	50	277	152	95	377	418	332	52	110	52	37
8	104	48	275	157	94	376	413	321	51	108	52	33
9	93	52	274	145	93	373	404	312	53	92	56	31
10	85	57	272	141	91	372	400	300	46	96	52	29
11	83	62	272	137	91	369	404	293	51	101	46	37
12	83	48	270	135	91	386	398	285	54	92	44	37
13	79	46	268	132	94	411	391	256	50	91	43	36
14	79	44	273	131	95	409	390	221	54	91	47	27
15	78	47	274	128	101	406	385	227	51	81	48	27
16	74	48	273	129	112	401	384	244	42	72	47	22
17	69	50	280	125	122	392	376	250	98	66	46	17
18	64	52	291	123	137	383	372	244	107	65	52	17
19	61	53	282	119	147	379	367	237	125	56	54	14
20	61	56	280	121	150	380	368	229	139	52	49	12
21	60	60	269	120	170	370	403	224	133	54	49	11
22	59	59	263	120	178	388	433	218	111	54	49	12
23	60	60	252	117	177	378	429	214	108	61	53	11
24	60	61	239	115	179	377	432	198	106	68	54	11
25	59	61	225	115	185	376	444	180	121	64	51	10
26	59	156	217	118	201	381	439	176	122	60	60	11
27	44	214	207	114	218	417	426	179	132	60	67	11
28	24	208	200	111	226	420	419	161	135	68	68	11
29	25	212	192	108	227	425	415	149	107	73	62	11
30	27	228	187	106	---	441	403	154	114	77	52	9.5
31	27	---	181	104	---	449	---	159	---	80	50	---
TOTAL	2497	2253	7868	4126	3677	11602	12321	7945	2615	2658	1679	744.5
MEAN	80.5	75.1	254	133	134	374	411	256	87.2	85.7	54.2	24.8
MAX	150	228	291	177	227	449	448	393	153	136	72	51
MIN	24	28	181	104	91	228	367	149	42	52	43	9.5
CFSM	.25	.23	.78	.41	.41	1.14	1.26	.78	.27	.26	.17	.08
IN.	.28	.26	.90	.47	.44	1.32	1.40	.90	.30	.30	.19	.08
CAL YR 1975 TOTAL	82651.0		MEAN 226	MAX 595	MIN	24	CFSM .69	IN 9.40				
WTR YR 1976 TOTAL	60185.5		MEAN 164	MAX 449	MIN	9.5	CFSM .50	IN 6.85				

ROCK RIVER BASIN
05429500 YAHARA RIVER NEAR MC FARLAND, WI--CONTINUED
WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1954-68, NOVEMBER 1975 TO SEPTEMBER 1976.

WATER QUALITY DATA, NOVEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
JAN , 1976											
22...	1415	120	395	6.5	2.0	--	2	14.2	108	--	<1
FEB											
12...	1800	91	480	6.3	3.0	--	2	13.3	103	--	85
MAR											
24...	1200	379	420	7.5	7.0	--	4	10.3	89	3.7	B1
APR											
27...	0915	426	440	8.0	10.0	8	6	10.7	99	4.5	B6
MAY											
19...	1230	242	440	7.9	16.0	--	2	12.0	126	--	B16
JUN											
29...	1400	107	420	9.0	22.5	--	6	9.7	115	--	B9
JUL											
21...	0945	54	450	5.6	23.5	--	--	5.6	68	--	--
SEP											
01...	1030	49	390	7.7	20.5	--	--	7.1	82	--	--

DATE	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
JAN , 1976											
22...	--	--	--	--	--	--	--	--	--	240	0
FEB											
12...	--	--	--	--	--	--	--	--	--	224	0
MAR											
24...	--	180	3	35	22	--	--	--	--	213	0
APR											
27...	--	180	17	31	26	12	12	.4	3.3	204	0
MAY											
19...	43	200	29	36	27	--	--	--	--	210	0
JUN											
29...	--	210	32	36	29	--	--	--	--	216	0
JUL											
21...	--	190	21	34	26	--	--	--	--	209	0
SEP											
01...	--	190	33	27	30	--	--	--	--	193	0

DATE	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SI02) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NITRATE (N) (MG/L)
JAN , 1976											
22...	197	1.2	--	26	23	--	263	--	.36	85.2	.31
FEB											
12...	184	1.8	--	27	26	--	207	--	.39	70.5	.44
MAR											
24...	175	11	--	27	23	--	250	--	.34	256	.43
APR											
27...	167	3.3	.5	25	21	.1	234	219	.32	269	.22
MAY											
19...	172	4.2	--	26	23	--	235	--	.32	154	--
JUN											
29...	177	.3	--	24	22	--	254	--	.35	73.4	.01
JUL											
21...	171	840	--	27	23	--	219	--	.30	31.9	.01
SEP											
01...	158	6.2	--	24	20	--	236	--	.32	31.2	.00

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT),

ROCK RIVER BASIN

05429500 YAHARA RIVER NEAR MC FARLAND, WI--CONTINUED

WATER QUALITY DATA, NOVEMBER 1975 TO SEPTEMBER 1976.

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
JAN , 1976										
22...	.02	.33	--	--	.82	1.1	5.1	.05	.03	7.1
FEB										
12...	.02	.46	.25	.75	1.0	1.5	6.5	.08	.06	8.0
MAR										
24...	.00	.43	.13	1.4	1.5	1.9	8.5	.11	.04	12
APR										
27...	.01	.23	.13	1.1	1.2	1.4	6.3	.11	.03	9.9
MAY										
19...	--	--	--	--	--	--	--	.08	.06	7.0
JUN										
29...	.01	.02	.45	1.1	1.5	1.5	6.7	.16	.10	15
JUL										
21...	.01	.02	.22	1.5	1.7	1.7	7.6	.16	.11	--
SEP										
01...	.01	.01	.17	1.1	1.3	1.3	5.8	.11	.04	12

DATE	TIME	INSTAN-TANEUS DIS-CHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CMRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)
APR , 1976								
27...	0915	426	1	1	10	0	0	90

DATE	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR , 1976							
27...	15	20	<.5	1	1	0	10

Date	Time	Water tem-perature (°C)	Dis-charge (cfs)	Specific conduct-ance	Date	Time	Water tem-perature (°C)	Dis-charge (cfs)	Specific conduct-ance
Nov. 11, 1975	1445	10.5	63.4	-	May 17, 1976	1310	16.5	249	390
Jan. 23, 1976	1430	2.0	118	460	July 15, 1976	1330	23.5	78.4	460
Feb. 16, 1976	1330	3.5	109	450	Aug. 16, 1976	1205	24.5	44.6	400
Apr. 15, 1976	1215	12.5	385	420	Sept. 28, 1976	1455	18.5	10.6	380

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
FEB , 1976					
12...	1800	3.0	91	1	.25
MAR					
24...	1200	7.0	379	13	13
APR					
22...	1440	--	434	54	63
MAY					
13...	1340	--	255	98	67
JUN					
29...	1400	22.5	107	12	3.5
SFP					
01...	1030	20.5	49	1	.13
27...	1135	--	10	4	.11

ROCK RIVER BASIN

05429580 DOOR CREEK NEAR COTTAGE GROVE, WI

LOCATION.--LAT 43°02'54", LONG 89°33'54", IN NE 1/4 NE 1/4 SEC.30, T.7 N., R.11 E., DANE COUNTY, HYDROLOGIC UNIT 07090001, ON RIGHT BANK 60 FT (18 M) UPSTREAM FROM HOPE ROAD, 2.5 MI (4.0 KM) SOUTHWEST OF COTTAGE GROVE, AND 1.8 MI (2.9 KM) ABOVE LITTLE DOOR CREEK.

DRAINAGE AREA.--15.3 MI² (39.6 KM²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--DECEMBER 1975 TO SEPTEMBER 1976.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 850 FT (259 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS FAIR.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 197 FT³/S (5.58 M³/S) MAR. 5. GAGE HEIGHT, 10.64 FT (3.243 M); MINIMUM DAILY, 1.3 FT³/S (0.037 M³/S) AUG. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			12	4.6	3.8	10	16	9.3	4.4	3.5	3.5	2.1
2			7.0	4.7	3.8	10	12	8.6	4.2	3.3	3.2	2.0
3			6.2	4.6	3.8	9.6	10	7.9	4.0	3.3	3.1	2.1
4			6.2	4.5	3.8	40	9.3	7.9	3.9	3.2	3.1	1.9
5			6.6	4.4	3.8	178	8.4	7.8	3.9	3.2	3.1	1.7
6			6.4	4.4	3.9	141	7.8	7.8	3.9	3.2	3.1	1.7
7			6.2	4.4	4.0	51	7.2	7.3	4.0	3.2	3.0	1.8
8			6.2	4.4	4.3	27	6.7	7.2	4.1	3.1	3.0	1.7
9			6.2	4.4	4.9	23	6.6	7.0	4.4	3.1	3.0	1.7
10			6.0	4.5	5.6	25	6.7	6.8	4.8	3.0	2.9	1.4
11			6.0	4.6	6.2	21	8.6	6.7	5.0	2.8	2.8	1.4
12			6.0	4.5	7.9	76	7.2	6.6	5.2	2.5	2.8	1.6
13			6.2	4.3	9.7	110	6.7	6.7	5.8	2.7	2.7	1.4
14			8.4	4.2	6.3	40	6.4	6.6	7.0	2.8	4.3	1.4
15			7.6	4.2	9.4	20	6.5	7.8	7.0	2.7	4.2	1.7
16			7.0	4.1	8.1	13	6.7	17	6.5	2.4	3.6	2.0
17			6.0	4.1	7.9	11	6.2	18	6.3	2.3	3.2	2.2
18			5.6	4.1	29	10	5.8	10	6.1	2.3	3.0	2.3
19			7.0	4.1	25	11	5.4	8.1	6.1	2.4	2.7	2.6
20			8.0	4.0	12	15	6.1	7.4	5.7	2.7	2.3	3.2
21			6.4	4.0	16	13	20	6.7	5.4	2.7	2.0	2.9
22			5.6	4.0	14	9.9	24	6.3	5.1	2.5	1.8	2.5
23			5.4	4.0	9.7	9.7	13	5.9	5.1	2.6	1.6	2.4
24			5.4	4.0	7.7	9.5	15	5.6	6.6	2.4	1.3	2.3
25			5.2	3.9	16	9.3	31	5.2	6.3	2.1	1.9	2.3
26			5.2	3.9	51	10	16	5.0	5.3	1.9	4.3	2.5
27			5.2	3.9	78	27	12	4.9	4.4	2.0	3.4	2.6
28			5.0	3.9	43	16	10	4.7	4.1	3.0	3.8	2.6
29			5.0	3.9	15	14	9.5	4.7	3.7	4.1	2.9	2.7
30			5.0	3.9	---	20	9.2	4.7	3.7	3.7	2.5	2.7
31			4.9	3.9	---	17	---	4.7	---	3.9	2.3	---
TOTAL			195.1	130.6	413.6	997.0	316.0	230.9	152.0	88.6	90.4	63.4
MEAN			6.29	4.21	14.3	32.2	10.5	7.45	5.07	2.86	2.92	2.11
MAX			12	4.8	78	178	31	18	7.0	4.1	4.3	3.2
MIN			4.9	3.9	3.8	9.3	5.4	4.7	3.7	1.9	1.3	1.4
CFSM			.41	.28	.93	2.10	.69	.49	.33	.19	.19	.14
IN.			.47	.32	1.01	2.42	.77	.56	.37	.22	.22	.15

05429580 DOOR CREEK NEAR COTTAGE GROVE, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--DECEMBER 1975 TO SEPTEMBER 1976.

WATER QUALITY DATA, DECEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
JAN , 1976											
22...	1300	4.0	690	7.9	.0	--	7	11.7	84	--	817
FEB											
12...	1615	7.5	615	7.8	7.0	--	20	10.9	94	--	230
MAR											
24...	1000	9.9	700	7.1	7.5	--	6	13.1	115	.5	24
APR											
27...	1100	12	750	7.2	6.0	33	6	10.5	93	1.6	110
MAY											
19...	1100	8.0	700	7.4	12.5	--	7	10.8	106	--	380
JUN											
30...	1400	3.8	650	8.1	18.5	--	7	11.4	127	--	540
JUL											
21...	1030	2.7	750	7.6	19.5	--	--	4.4	50	--	--
SEP											
01...	1200	2.1	670	7.7	15.0	--	6	6.2	64	--	4600

DATE	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
JAN , 1976											
22...	--	--	--	--	--	--	--	--	--	395	0
FEB											
12...	--	--	--	--	--	--	--	--	--	304	0
MAR											
24...	--	390	92	86	42	--	--	--	--	360	0
APR											
27...	--	410	120	84	48	8.5	4	.2	1.6	348	0
MAY											
19...	280	380	75	86	41	--	--	--	--	376	0
JUN											
30...	--	370	53	71	47	--	--	--	--	388	0
JUL											
21...	--	330	18	68	40	--	--	--	--	386	0
SEP											
01...	--	340	27	72	40	--	--	--	--	387	0

DATE	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NITRATE (N) (MG/L)
JAN , 1976											
22...	324	8.0	--	37	15	--	401	--	.55	4.33	3.7
FEB											
12...	249	7.7	--	44	25	--	376	--	.51	7.71	3.2
MAR											
24...	295	46	--	71	18	--	457	--	.62	12.2	5.0
APR											
27...	285	35	.3	75	18	12	458	419	.62	14.8	5.6
MAY											
19...	308	24	--	62	20	--	437	--	.59	9.44	3.3
JUN											
30...	318	4.9	--	42	16	--	431	--	.59	4.42	3.0
JUL											
21...	317	16	--	41	17	--	409	--	.56	2.98	2.2
SEP											
01...	317	12	--	36	15	--	411	--	.56	2.33	1.9

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT),

ROCK RIVER BASIN

05429580 DOOR CREEK NEAR COTTAGE GROVE, WI--CONTINUED

WATER QUALITY DATA, DECEMBER 1975 TO SEPTEMBER 1976

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
JAN . 1976										
22...	.02	3.7	--	--	.34	4.0	18	.07	.06	7.1
FEB										
12...	.04	3.2	.69	1.3	2.0	5.2	23	.48	.38	11
MAR										
24...	.04	5.0	.14	.82	.96	6.0	26	.13	.09	12
APR										
27...	.02	5.6	.13	1.2	1.3	6.9	31	.15	.15	15
MAY										
19...	.06	3.4	.16	.94	1.1	4.5	20	.21	.17	10
JUN										
30...	.11	3.1	.05	.33	.38	3.5	15	.14	.12	6.0
JUL										
21...	.20	2.4	.05	.48	.53	2.9	13	.11	.09	--
SEP										
01...	.14	2.0	.15	.28	.43	2.4	11	.19	.16	2.9

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)
APR . 1976								
27...	1100	12	1	1	10	1	0	470

DATE	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR . 1976							
27...	5	90	<.5	1	0	0	20

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Dec. 3, 1975	1135	2.5	6.17	700	Apr. 27, 1976	1140	8.0	12.1	-
Jan. 7, 1976	1300	0.5	4.37	700	May 19, 1976	1120	12.5	8.05	700
Jan. 22, 1976	1215	0.0	4.06	690	June 9, 1976	1115	18.5	4.34	-
Feb. 12, 1976	1554	7.0	7.58	615	June 9, 1976	1600	18.5	3.98	-
Feb. 27, 1976	1805	0.5	72.3	340	June 30, 1976	1445	18.5	3.67	650
Feb. 28, 1976	0950	0.5	44.5	470	July 9, 1976	1305	22.5	3.07	750
Feb. 28, 1976	1525	0.5	31.0	600	July 21, 1976	1105	19.5	2.69	-
Mar. 5, 1976	1140	1.0	194	-	Aug. 13, 1976	0950	21.0	2.57	580
Apr. 22, 1976	1240	11.5	25.2	700					

05429580 DOOR CREEK NEAR COTTAGE GROVE, WI--CONTINUED

WATER QUALITY DATA, DECEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEDUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
FEB , 1976					
27...	1820	--	73	736	145
28...	0920	--	49	74	9.9
28...	1450	--	31	38	3.2
28...	2045	--	24	44	2.9
MAR					
04...	1515	--	24	143	9.5
04...	1750	--	58	174	27
05...	1000	--	190	38	19
06...	1015	--	162	5	2.2
06...	1545	--	132	14	5.0
12...	1255	--	83	1000	225
12...	1810	--	105	790	224
13...	1030	--	121	191	62
24...	1000	7.5	9.9	17	.45
APR					
01...	1455	--	15	14	.59
08...	1450	--	6.7	39	.71
16...	1125	--	6.8	55	1.0
20...	2230	--	11	167	5.0
21...	0900	--	19	43	2.2
21...	1240	--	18	32	1.6
21...	2010	--	25	142	9.8
22...	1245	--	23	55	3.5
27...	1100	8.0	12	15	.49
MAY					
07...	0945	--	7.4	16	.32
13...	1000	--	6.7	61	1.1
17...	1015	--	19	53	2.8
JUN					
30...	1400	10.5	3.8	67	.69
JUL					
09...	1310	--	3.1	80	.67
28...	1015	--	5.3	28	.40
AUG					
14...	1250	--	4.7	10	.13
SEP					
01...	1200	15.0	2.1	65	.37
27...	1015	--	2.7	62	.45

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM
FEB , 1976										
27...	1820	73	736	145	51	66	83	94	99	100

ROCK RIVER BASIN

05430500 ROCK RIVER AT AFTON, WI

LOCATION.--LAT 42°36'33", LONG 89°04'14", IN NE 1/4 SEC.28, T.2 N., R.12 E., ROCK COUNTY, HYDROLOGIC UNIT 07090001, ON RIGHT BANK IN AFTON, 0.3 MI (0.5 KM) DOWNSTREAM FROM HIGHWAY BRIDGE AND 1.1 MI (1.8 KM) UPSTREAM FROM BASS CREEK.

DRAINAGE AREA.--3,338 MI² (8,645 KM²), REVISED.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--JANUARY 1914 TO CURRENT YEAR. MONTHLY DISCHARGE ONLY FOR JANUARY 1914, PUBLISHED IN WSP 1308.

REVISED RECORDS.--WSP 1238: 1916(M), 1919(M), 1933, 1937-38, 1943. WRD WI-71-1: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 742.36 FT (226.271 M) ABOVE MEAN SEA LEVEL. PRIOR TO AUG. 21, 1932, A NONRECORDING GAGE, AND AUG. 21, 1932, TO SEPT. 30, 1933, WATER-STAGE RECORDER, AT SAME SITE AT DATUM 1 FT (0.30 M) HIGHER.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS AND DISCHARGE BELOW 600 FT³/S (17.0 M³/S), WHICH ARE FAIR. DIURNAL FLUCTUATION CAUSED BY POWERPLANTS ABOVE STATION.

AVERAGE DISCHARGE.--62 YEARS, 1,764 FT³/S (49.96 M³/S), 7.19 IN/YR (183 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 13,000 FT³/S (368 M³/S) MAR. 23, 24, 1929, GAGE HEIGHT, 11.81 FT (3.600 M) PRESENT DATUM; MAXIMUM GAGE HEIGHT OBSERVED, 13.05 FT (3.978 M) FEB. 5, 1916, PRESENT DATUM (BACKWATER FROM ICE); MINIMUM DISCHARGE, 22 FT³/S (0.62 M³/S) SEPT. 9, 1964; MINIMUM DAILY, 42 FT³/S (1.189 M³/S) AUG. 25, 26, 1934; MINIMUM GAGE HEIGHT, 0.09 FT (0.027 M) AUG. 26, 1934.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 6,760 FT³/S (191 M³/S) MAR. 5, GAGE HEIGHT, 8.93 FT (2.722 M); MINIMUM DAILY, 334 FT³/S (9.46 M³/S) SEPT. 28.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 8 TO FEB. 18.)

2.3	311	7.0	4,210
3.0	740	9.0	6,860
5.0	2,220		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	757	780	1210	1200	820	3150	5720	4780	2050	768	565	565
2	792	905	1380	1100	840	3360	5670	4830	2050	709	587	623
3	755	1010	1510	1100	820	3460	5710	4810	1950	666	554	542
4	730	965	1560	1500	820	3900	5770	4730	1690	670	485	463
5	735	1080	1730	1700	800	6350	5500	4600	1100	616	429	534
6	748	1130	2080	1800	780	5230	5440	5090	1030	598	573	486
7	820	1160	1990	1700	760	5040	5420	4980	1110	506	541	403
8	810	1070	1900	1600	760	5360	5300	4720	1360	621	491	415
9	829	1140	1800	1500	760	5460	5090	4500	1330	676	460	462
10	772	1060	1700	1400	760	5750	4910	4410	1220	530	482	447
11	816	1040	1700	1400	760	5810	5160	4410	882	439	419	383
12	825	1150	1600	1300	740	6060	4790	4300	875	553	451	337
13	782	1200	1600	1200	760	6470	4590	4090	879	537	459	367
14	721	1230	1600	1000	780	6300	4410	3970	1120	476	509	361
15	789	1150	1600	920	800	6440	4250	3810	1040	475	628	411
16	767	1160	1500	860	900	6540	4160	3810	745	489	599	496
17	1010	1170	1500	780	1200	6500	4030	4150	964	464	562	468
18	1130	1160	1600	780	1600	6470	3940	3880	981	435	472	472
19	994	1270	1600	760	1920	6460	3830	3520	1010	444	510	407
20	678	1240	1600	760	1860	6290	3870	3450	968	427	510	377
21	862	1290	1600	760	2150	6150	4010	3440	920	414	519	404
22	950	1230	1600	760	2140	6230	3930	3340	938	511	425	395
23	919	1210	1600	760	2130	5960	3960	3220	948	478	483	407
24	940	1250	1600	780	2180	5760	4130	3110	1020	427	471	531
25	853	1270	1600	780	2390	5730	4900	2930	1060	451	481	477
26	690	1120	1600	780	3020	5750	4410	2760	786	438	649	455
27	911	1120	1500	800	2780	5960	4370	2630	812	405	556	375
28	917	1150	1300	600	2880	5830	4590	2520	787	547	569	334
29	954	1300	1200	800	3000	5740	4690	2470	694	537	637	392
30	897	1360	740	800	---	5710	4730	2320	771	525	594	337
31	643	---	960	820	---	5580	---	2220	---	524	579	---
TOTAL	26196	34370	48060	33000	41910	174820	141300	117800	33090	16378	16269	13166
MEAN	845	1146	1550	1065	1445	5639	4710	3800	1103	528	525	440
MAX	1130	1360	2080	1800	3020	6540	5770	5090	2050	768	649	623
MIN	643	780	740	760	740	3150	3830	2220	694	405	419	334
CFSM	.25	.34	.46	.32	.43	1.69	1.41	1.14	.33	.16	.16	.13
IN.	.29	.38	.54	.37	.47	1.95	1.57	1.31	.37	.18	.18	.15
CAL YR 1975	TOTAL	951144	MEAN	2606	MAX	10400	MIN	641	CFSM	.78	IN	10.60
WTR YR 1976	TOTAL	696399	MEAN	1903	MAX	6540	MIN	334	CFSM	.57	IN	7.76

ROCK RIVER BASIN
05430500 ROCK RIVER AT AFTON, WI--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.5	---	---	19.0	18.5	24.0	19.5	25.5	22.0	21.5	18.5
2	8.5	8.0	---	---	20.0	18.0	24.0	19.5	26.0	22.0	20.0	16.5
3	9.5	8.5	---	---	20.5	18.5	24.0	20.0	30.5	21.5	21.0	17.0
4	10.0	9.5	---	---	21.0	18.5	24.0	20.0	23.5	21.0	20.5	18.0
5	10.0	9.5	---	---	21.5	18.5	24.5	20.0	25.0	21.0	20.5	17.0
6	10.5	10.0	---	---	23.5	18.5	25.0	21.0	23.5	21.0	20.0	16.0
7	12.0	10.5	---	---	24.0	20.0	24.0	21.0	23.0	20.0	20.5	17.0
8	11.5	11.5	---	---	25.0	21.5	25.5	21.5	24.5	19.5	21.5	17.0
9	11.5	11.5	---	---	25.0	23.0	25.5	22.0	24.0	20.0	20.5	18.0
10	---	---	---	---	24.0	23.5	27.0	23.0	23.5	21.0	18.5	15.0
11	---	---	15.5	14.5	26.5	22.0	27.0	23.5	25.0	21.0	19.0	14.5
12	---	---	15.5	14.5	26.5	23.0	25.5	21.5	24.5	22.0	19.0	14.5
13	---	---	15.5	14.5	26.5	22.0	25.5	21.5	26.0	21.5	19.0	15.0
14	---	---	15.5	14.5	25.5	22.0	27.0	23.0	24.0	21.0	18.5	16.5
15	8.5	7.0	15.5	15.5	25.0	23.0	25.5	23.5	23.0	19.5	16.5	15.5
16	10.0	8.5	16.5	15.5	23.0	20.5	24.0	21.5	23.5	19.0	16.0	14.5
17	11.0	10.0	16.5	16.0	24.0	20.5	24.0	20.0	22.0	19.5	16.0	14.5
18	11.0	10.5	16.0	15.0	22.0	20.5	25.5	20.0	23.5	19.5	16.5	14.0
19	10.5	10.5	16.5	15.5	23.0	19.5	23.5	21.0	24.0	20.0	15.5	13.5
20	10.5	9.5	17.0	16.5	23.5	19.5	23.5	20.5	24.0	20.0	15.5	13.5
21	9.5	8.5	19.0	17.0	24.0	20.0	23.5	21.0	24.5	20.5	14.0	12.0
22	6.5	8.5	18.5	18.0	23.0	20.5	22.0	20.0	25.0	21.0	13.5	10.5
23	8.5	8.0	18.5	17.0	22.0	20.5	26.0	21.0	24.0	21.5	13.5	11.5
24	9.0	7.0	18.0	16.5	20.5	20.0	26.0	21.5	24.0	20.5	13.5	10.0
25	---	---	18.0	16.0	23.0	19.5	26.5	22.0	23.5	20.0	12.0	10.5
26	---	---	19.0	16.5	24.0	20.0	25.0	22.0	24.5	20.5	11.5	11.0
27	---	---	19.5	18.0	25.0	20.5	26.5	21.5	24.5	21.0	13.0	10.0
28	---	---	19.0	18.5	24.0	21.5	25.5	24.0	23.5	20.5	13.0	9.5
29	---	---	18.5	18.5	22.0	20.5	25.0	23.0	22.0	19.5	12.0	10.0
30	---	---	18.5	18.0	23.0	20.5	26.5	23.0	21.5	19.0	13.5	10.0
31	---	---	19.0	18.5	---	---	25.5	23.5	23.0	19.5	---	---
MONTH	---	---	---	---	26.5	18.0	27.0	19.5	30.5	19.0	21.5	9.5

05431500 TURTLE CREEK NEAR CLINTON, WI

LOCATION.--LAT 42°35'47", LONG 88°51'50", IN SE 1/4 SEC.29, T.2 N., R.14 E., ROCK COUNTY, HYDROLOGIC UNIT 07090001, ON LEFT BANK 15 FT (5 M) DOWNSTREAM FROM BRIDGE ON STATE HIGHWAY 140, 2.7 MI (4.3 KM) NORTH OF CLINTON, 11 MI (18 KM) NORTHEAST OF BELOIT, AND 16 MI (26 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--202 MI² (523 KM²).

PERIOD OF RECORD.--SEPTEMBER 1939 TO CURRENT YEAR.

REVISED RECORDS.--WSP 955: 1940. WSP 1308: 1950(M). WDR WI-71-1: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 817.00 FT (249.022 M) ABOVE MEAN SEA LEVEL (LEVELS BY CORPS OF ENGINEERS).

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, AND PERIOD OF MISSING RECORD, WHICH ARE FAIR. SOME SEASONAL REGULATION CAUSED BY DAMS USED TO MAINTAIN LEVELS OF TURTLE AND DELAVAN LAKES.

AVERAGE DISCHARGE.--37 YEARS, 117 FT³/S (3.313 M³/S), 7.87 IN/YR (200 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE: 16,500 FT³/S (467 M³/S) APR. 21, 1973. GAGE HEIGHT, 12.85 FT (3.971 M) FROM RATING CURVE EXTENDED ABOVE 6,500 FT³/S (184 M³/S) ON BASIS OF SLOPE-AREA MEASUREMENT OF PEAK FLOW; MINIMUM DISCHARGE, 8.0 FT³/S (0.23 M³/S) DEC. 29, 1956. GAGE HEIGHT, 2.04 FT (0.622 M), RESULT OF FREEZEUP.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 2,780 FT³/S (78.7 M³/S) MAR. 5, GAGE HEIGHT, 7.75 FT (2.362 M), NO OTHER PEAK ABOVE BASE OF 1,200 FT³/S (34 M³/S); MINIMUM, 46 M³/S (1.30 M³/S) AUG. 24, 25, GAGE HEIGHT, 2.83 FT (0.863 M).

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE NOV. 30 TO FEB. 18, FEB. 21-22.)

OCT. 1 TO MAR. 4				MAR. 5 TO SEPT. 30			
3.0	66	4.4	508	2.7	38	5.0	800
3.2	105	5.0	800	3.2	108	6.0	1,380
3.8	267			3.8	266	7.0	2,090
				4.4	508	8.0	3,040

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	84	180	76	72	197	168	182	110	72	64	53
2	77	88	190	70	72	270	158	170	117	72	58	54
3	77	92	160	66	72	503	146	160	102	70	57	53
4	75	101	110	66	72	660	139	141	94	68	58	51
5	75	99	96	70	74	2360	133	117	89	68	57	51
6	73	92	92	76	74	815	124	179	85	68	56	50
7	75	90	90	78	76	545	121	170	84	68	57	50
8	73	92	88	78	78	480	115	165	84	66	56	49
9	75	107	86	78	80	427	112	158	82	64	54	57
10	73	140	84	76	82	405	110	148	79	62	53	61
11	73	145	84	76	88	384	112	135	75	62	51	58
12	73	133	84	74	90	414	112	119	74	62	51	57
13	73	123	88	74	94	453	108	117	72	60	51	53
14	71	119	110	74	100	364	106	117	126	58	54	54
15	77	110	140	74	120	322	106	117	137	58	57	54
16	75	92	120	74	130	290	122	133	128	66	56	54
17	75	88	110	74	150	263	115	146	130	60	54	56
18	77	86	110	72	160	231	110	135	121	56	53	56
19	84	82	100	70	186	215	106	124	112	56	51	57
20	86	79	98	72	148	190	105	117	105	60	50	61
21	86	82	96	74	140	185	124	115	102	60	50	63
22	86	80	94	74	140	170	196	117	95	60	49	56
23	79	79	92	76	145	155	205	115	88	58	48	51
24	82	75	92	76	138	133	237	115	88	56	48	51
25	84	73	90	76	214	128	440	113	90	54	46	50
26	84	86	90	76	393	126	380	108	84	54	53	53
27	84	77	88	74	258	218	336	95	82	54	53	54
28	82	80	84	74	222	212	263	91	76	56	61	54
29	82	80	82	72	211	182	218	100	74	58	64	54
30	84	160	80	72	---	179	196	100	72	62	57	53
31	82	---	78	72	---	176	---	103	---	70	54	---
TOTAL	2431	2914	3186	2284	3879	11652	5023	4022	2857	1918	1681	1628
MEAN	78.4	97.1	103	73.7	134	376	167	130	95.2	61.9	54.2	54.3
MAX	86	160	190	78	393	2360	440	182	137	72	64	63
MIN	71	73	78	66	72	126	105	91	72	54	48	49
CFSM	.39	.48	.51	.36	.66	1.86	.83	.64	.47	.31	.27	.27
IN.	.45	.54	.59	.42	.71	2.15	.93	.74	.53	.35	.31	.30
CAL YR 1975	TOTAL	57330	MEAN 157	MAX 2120	MIN 53	CFSM .78	IN 10.56					
WTR YR 1976	TOTAL	43475	MEAN 119	MAX 2360	MIN 46	CFSM .59	IN 8.01					

NOTE.--ND GAGE-HEIGHT RECORD JUNE 23 TO AUG. 3.

ROCK RIVER BASIN

05432500 PECATONICA RIVER AT DARLINGTON, WI

LOCATION.--LAT 42°40'40", LONG 90°07'07", IN NE 1/4 SEC.3, T.2 N., R.3 E., LAFAYETTE COUNTY, HYDROLOGIC UNIT 07090003, ON RIGHT BANK IN DARLINGTON, 0.3 MI (0.5 KM) DOWNSTREAM FROM VINEGAR BRANCH, AND 3.6 MI (5.8 KM) UPSTREAM FROM OTTER CREEK.

DRAINAGE AREA.--273 MI² (707 KM²), REVISED.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--SEPTEMBER 1939 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 802.42 FT (244.578 M) ABOVE MEAN SEA LEVEL.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

AVERAGE DISCHARGE.--37 YEARS, 184 FT³/S (5.211 M³/S), 9.15 IN/YR (232 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 22,000 FT³/S (623 M³/S), JULY 16, 1950, GAGE HEIGHT, 20.71 FT (6.312 M), FROM RATING CURVE EXTENDED ABOVE 11,000 FT³/S (312 M³/S) ON BASIS OF SLOPE-AREA DETERMINATION OF PEAK FLOW; MINIMUM, 17 FT³/S (0.48 M³/S) NOV. 29, 1966, GAGE HEIGHT, 2.09 FT (0.637 M), RESULT OF FREEZEUP; MINIMUM GAGE HEIGHT, 1.07 FT (0.326 M), DEC. 6, 1968, RESULT OF FREEZEUP.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--FLOOD OF FEB. 21, 1937, REACHED A STAGE OF 17.6 FT (5.36 M), FROM FLOODMARKS.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 1,500 FT³/S (42.5 M³/S) AND MAXIMUM (#):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)	DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)
MAR. 5	1700	2,250 63.7	12.50 3.810	MAR. 13	0800	2,000 56.6	12.00 3.658

MINIMUM DISCHARGE, 46 FT³/S (1.30 M³/S) SEPT. 13, GAGE HEIGHT, 1.53 FT (0.466 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 16-20, JAN. 1 TO FEB. 18, FEB. 22-24.)

1.4	41	7.0	720
2.0	92	9.0	1,070
3.0	200	11.0	1,620
5.0	447	15.0	2,550

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	99	277	90	74	235	232	181	105	78	88	54
2	105	105	125	84	72	198	199	172	100	73	72	56
3	105	126	140	78	72	169	178	161	96	72	70	54
4	105	120	120	72	72	487	167	153	91	70	74	53
5	104	109	133	76	72	2010	154	176	89	69	66	51
6	103	104	122	78	74	1500	147	203	88	68	66	50
7	101	106	100	78	76	401	140	154	88	68	62	50
8	101	107	112	76	78	409	131	141	87	69	61	50
9	103	106	107	74	82	373	126	134	85	68	60	49
10	103	143	105	74	100	793	123	130	84	66	58	50
11	100	134	105	74	110	734	138	127	85	64	58	49
12	100	109	101	74	130	1030	141	123	85	62	59	48
13	100	108	102	74	120	1720	124	127	88	65	70	47
14	100	103	119	76	120	445	120	147	108	67	76	47
15	109	100	126	76	120	272	133	144	104	66	85	47
16	145	102	84	78	170	227	148	172	85	66	68	48
17	102	101	72	78	140	192	136	165	82	64	61	49
18	101	100	80	74	210	186	154	148	82	63	62	50
19	101	99	90	74	454	185	199	124	84	64	60	51
20	102	101	100	76	345	186	170	122	81	68	58	57
21	103	110	103	78	414	184	301	122	79	69	56	57
22	103	108	95	78	180	163	312	115	77	65	55	53
23	103	97	95	78	150	153	253	112	80	66	55	50
24	103	97	94	78	170	150	264	110	85	64	54	50
25	104	94	94	78	433	147	342	108	89	69	54	50
26	103	75	94	76	1030	147	293	105	85	63	54	52
27	98	103	91	74	1400	229	240	103	79	68	56	54
28	96	114	89	74	1330	214	215	101	80	120	97	54
29	96	109	88	74	483	180	184	101	80	96	68	53
30	96	339	91	76	---	232	185	104	82	90	55	53
31	98	---	92	76	---	256	---	106	---	98	54	---
TOTAL	3165	3428	3346	2374	8281	13887	5649	4195	2613	2218	1992	1536
MEAN	102	114	108	76.6	286	445	188	135	87.1	71.5	64.3	51.2
MAX	112	339	277	90	1400	2010	342	203	108	120	97	57
MIN	96	75	72	72	72	147	120	101	77	62	54	47
CFSM	.37	.42	.40	.28	1.05	1.63	.69	.49	.32	.26	.24	.19
IN.	.43	.47	.46	.32	1.13	1.88	.77	.57	.36	.30	.27	.21
CAL YR 1975 TOTAL	82555		MEAN 226	MAX 5500	MIN 72	CFSM .83	IN 11.25					
WTR YR 1976 TOTAL	52604		MEAN 144	MAX 2010	MIN 47	CFSM .53	IN 7.17					

05432500 PECATONICA RIVER AT DARLINGTON, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1954 TO CURRENT YEAR.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 29, 1975	1315	1.0	96.0	610	Apr. 29, 1976	1325	11.0	191	580
Dec. 3, 1975	1340	0.0	128	500	June 3, 1976	1310	17.5	94.0	670
Jan. 14, 1976	1335	0.0	78.4	-	July 8, 1976	1235	21.0	70.3	650
Feb. 11, 1976	1345	-	114	820	Aug. 6, 1976	1240	19.0	68.2	740
Mar. 19, 1976	0955	7.0	180	650					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
MAR , 1976					
16...	1300	4.5	1280	165	570

ROCK RIVER BASIN

05433000 EAST BRANCH PECATONICA RIVER NEAR BLANCHARDVILLE, WI

LOCATION.--LAT 42°47'10" LONG 89°51'40", IN SE 1/4 SEC. 26, T.4 N., R.5 E., LAFAYETTE COUNTY, HYDROLOGIC UNIT 07090003, ON LEFT BANK AT DOWNSTREAM SIDE OF BRIDGE ON STATE HIGHWAY 78, 1.8 MI (2.9 KM) SOUTH OF BLANCHARDVILLE AND 4.5 MI (7.2 KM) UPSTREAM FROM SAWMILL CREEK.

DRAINAGE AREA.--221 MI² (572 KM²).

PERIOD OF RECORD.--SEPTEMBER 1939 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 796.8 FT (242.86 M) ABOVE MEAN SEA LEVEL, UNADJUSTED. PRIOR TO DEC. 20, 1939, NONRECORDING GAGE AT BRIDGE 50 FT (15 M) UPSTREAM AT SAME DATUM. AUXILIARY NONRECORDING GAGE 2.7 MI (4.3 KM) UPSTREAM AT SAME DATUM READ EVERY SIX HOURS OR MORE OFTEN WHEN STAGES EXCEED 10 FT (3 M).

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

AVERAGE DISCHARGE.--37 YEARS, 141 FT³/S (3.993 M³/S), 8.66 IN/YR (220 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 11,700 FT³/S (331 M³/S) FEB. 28, 1948, GAGE HEIGHT, 15.74 FT (4.798 M); MINIMUM, 18 FT³/S (0.51 M³/S) NOV. 29, 1966.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 1,300 FT³/S (36.8 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)	DATE	TIME	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)
FEB. 28	1200	1,890 53.5	12.28 3.743	MAR. 13	0500	1,790 50.7	12.20 3.719
MAR. 5	1200	*2,500 70.8	*13.04 3.975				

MINIMUM DISCHARGE, 62 FT³/S (1.76 M³/S) SEPT. 13, GAGE HEIGHT, 3.08 FT (0.939 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (SHIFTING-CONTROL METHDD USED MAR. 5-20, SEPT. 13-21; STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 17 TO FEB. 25.)

3.0	64	10.0	932
4.0	144	11.0	1,250
6.0	349	12.0	1,730
8.0	584	13.0	2,560
9.0	704		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	100	121	100	76	200	193	161	113	90	78	70
2	102	103	130	90	76	165	167	154	111	86	78	70
3	102	117	114	84	76	147	158	148	108	84	76	68
4	103	108	101	90	76	334	151	143	106	82	78	68
5	103	102	109	100	76	2060	145	143	103	80	80	66
6	102	101	107	96	78	1040	140	158	102	80	80	66
7	102	101	97	94	80	325	130	140	102	80	78	66
8	102	101	100	92	84	305	120	134	100	80	77	64
9	103	100	99	90	90	247	110	130	99	78	76	64
10	101	122	98	88	100	560	120	127	98	78	74	64
11	100	110	98	86	110	534	130	124	98	78	74	64
12	100	103	96	84	120	999	130	121	97	77	73	64
13	102	102	98	84	150	1420	110	122	99	78	74	65
14	102	99	112	82	130	369	110	130	106	79	90	66
15	105	100	114	82	160	231	120	133	102	78	82	68
16	101	101	99	82	220	185	130	190	97	79	74	69
17	99	100	90	80	110	160	120	203	95	78	74	68
18	99	99	110	80	120	160	150	149	95	78	74	69
19	99	98	110	78	150	170	180	135	96	78	71	71
20	100	101	110	78	100	177	160	132	94	84	70	77
21	101	109	110	80	150	173	260	128	93	82	70	73
22	101	103	110	82	140	148	280	122	92	79	69	71
23	102	98	110	84	130	143	250	121	94	79	68	70
24	102	99	110	84	120	142	280	119	105	78	68	69
25	106	97	110	82	110	138	310	117	103	76	68	69
26	98	97	110	80	429	142	260	115	96	76	68	71
27	98	142	110	78	1080	233	220	114	90	78	74	72
28	99	108	110	78	1540	183	190	113	90	97	100	71
29	97	105	110	78	514	159	170	114	92	98	84	71
30	96	240	120	80	---	208	161	114	94	82	70	71
31	98	---	110	80	---	206	---	114	---	81	68	---
TOTAL	3130	3266	3333	2626	6397	11663	5155	4168	2970	2511	2338	2055
MEAN	101	109	108	84.7	221	376	172	134	99.0	81.0	75.4	68.5
MAX	106	240	130	100	1540	2060	310	203	113	98	100	77
MIN	96	97	90	78	76	138	110	113	90	76	68	64
CFSM	.46	.49	.49	.38	1.00	1.70	.78	.61	.45	.37	.34	.31
IN.	.53	.55	.56	.44	1.08	1.96	.87	.70	.50	.42	.39	.35
CAL YR 1975	TOTAL	63889	MEAN 175	MAX 3050	MIN 84	CFSM .79	IN 10.75					
WTR YR 1976	TOTAL	49612	MEAN 136	MAX 2060	MIN 64	CFSM .62	IN 8.35					

0543450 PECATONICA RIVER AT MARTINTOWN, WI

LOCATION.--LAT 42°30'34", LONG 89°47'58", IN SE 1/4 SEC.32, T.1 N., R.6 E., GREEN COUNTY, HYDROLOGIC UNIT 0709003, ON RIGHT BANK ABOUT 400 FT (120 M) DOWNSTREAM FROM HIGHWAY BRIDGE IN MARTINTOWN, 0.3 MI (0.5 KM) UPSTREAM FROM WISCONSIN-ILLINOIS STATE LINE AND 8.8 MI (14.1 KM) DOWNSTREAM FROM SKINNER CREEK.

DRAINAGE AREA.--1,034 MI² (2,678 KM²).

PERIOD OF RECORD.--OCTOBER 1939 TO CURRENT YEAR.

REVISED RECORD.--WSP 1308: 1949-50(M). WOR WI-71-1: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 757.9 FT (231.01 M) ABOVE MEAN SEA LEVEL. PRIOR TO JAN. 6, 1940, NONRECORDING GAGE AT SAME SITE AND DATUM. AUXILIARY NONRECORDING GAGE 1.2 MI (1.9 KM) DOWNSTREAM READ SEVERAL TIMES DAILY DURING HIGH WATER.

REMARKS.--RECORDS 6000 EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR.

AVERAGE DISCHARGE.--37 YEARS, 708 FT³/S (20.05 M³/S), 9.30 IN/YR (236 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 15,100 FT³/S (428 M³/S) JULY 1, 1969, GAGE HEIGHT, 21.46 FT (6.541 M); NO FLOW FOR PART OF DEC. 14, 1939.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 3,880 FT³/S (110 M³/S) MAR. 8, GAGE HEIGHT, 14.45 FT (4.404 M), NO PEAK ABOVE BASE OF 4,000 FT³/S (113 M³/S); MINIMUM, 195 FT³/S (5.52 M³/S) SEPT. 15, GAGE HEIGHT, 2.96 FT (0.902 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND). (STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 19 TO FEB. 24.)

3.0	202	9.0	1,580
4.0	392	11.0	2,420
5.0	624	13.0	2,950
7.0	1,100	15.0	4,360

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	418	399	696	400	340	2520	826	673	442	321	287	242
2	414	396	754	390	330	2060	782	648	426	316	276	247
3	392	441	468	370	330	1260	725	622	411	304	267	242
4	384	464	487	350	330	1200	665	597	400	289	256	240
5	401	459	500	330	320	2490	626	590	388	288	254	226
6	394	432	475	340	320	2610	598	686	373	285	254	229
7	390	423	461	350	320	3170	571	708	365	288	261	224
8	384	421	432	330	320	3800	547	615	365	281	252	231
9	392	427	416	320	330	3040	523	557	358	278	251	217
10	401	434	421	310	350	1850	505	529	356	276	251	210
11	405	466	418	310	400	1560	507	512	353	269	240	218
12	407	482	425	300	450	1640	519	498	353	247	240	208
13	405	436	414	300	500	1840	528	487	353	267	240	212
14	412	421	429	310	560	2050	505	497	380	254	240	216
15	425	407	457	310	560	2220	496	525	399	258	260	212
16	421	401	464	300	540	1800	514	584	390	256	280	212
17	416	403	375	300	640	1100	554	759	365	240	270	214
18	418	405	369	300	880	852	538	740	346	252	260	222
19	405	403	350	310	1100	780	521	630	344	252	250	216
20	399	403	460	310	1000	754	564	560	337	263	240	229
21	407	416	450	320	980	749	706	531	336	261	240	244
22	416	427	440	330	960	715	878	511	333	276	230	242
23	410	421	430	330	800	662	1020	491	329	267	230	235
24	421	396	420	320	660	619	931	473	338	263	230	231
25	432	390	420	320	1000	595	924	463	355	249	233	222
26	434	346	420	320	1800	588	1000	455	354	252	242	220
27	418	334	420	310	2110	682	960	449	337	258	243	232
28	407	412	420	310	2180	792	826	433	328	274	261	242
29	399	482	410	310	2310	799	749	431	331	318	295	239
30	401	540	410	320	---	746	704	430	325	324	300	237
31	390	---	410	340	---	785	---	438	---	316	258	---
TOTAL	12618	12687	13921	10070	22720	46328	20312	17122	10870	8542	7891	6811
MEAN	407	423	449	325	783	1494	677	552	362	276	255	227
MAX	434	540	754	400	2310	3800	1020	759	442	324	300	247
MIN	384	334	350	300	320	588	496	430	325	240	230	208
CFSM	.39	.41	.43	.31	.76	1.44	.65	.53	.35	.27	.25	.22
IN.	.45	.46	.50	.36	.82	1.67	.73	.62	.39	.31	.28	.25
CAL YR 1975	TOTAL	299005	MEAN 819	MAX 12700	MIN 334	CFSM .79	IN 10.76					
WTR YR 1976	TOTAL	189892	MEAN 519	MAX 3800	MIN 208	CFSM .50	IN 6.83					

ROCK RIVER BASIN

05436000 MOUNT VERNON CREEK NEAR MOUNT VERNON, WI

LOCATION.--LAT 42°55'20", LONG 89°37'30", IN NW 1/4 SW 1/4 SEC.12, T.5 N., R.7 E., DANE COUNTY, HYDROLOGIC UNIT 07090004, ON RIGHT BANK ABOUT 400 FT (122 M) DOWNSTREAM FROM BRIDGE ON STATE HIGHWAY 92, 0.9 MI (1.4 KM) UPSTREAM FROM WEST BRANCH SUGAR RIVER, AND 2.5 MI (4.0 KM) SOUTHEAST OF MOUNT VERNON.

DRAINAGE AREA.--16.4 MI² (42.5 KM²), REVISED.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--JANUARY 1954 TO SEPTEMBER 1965, DECEMBER 1975 TO SEPTEMBER 1976.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 875 FT (267 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS FAIR.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 940 FT³/S (26.6 M³/S) APR. 1, 1959; GAGE HEIGHT, 6.32 FT (1.926 M); MAXIMUM GAGE HEIGHT, 7.00 FT (2.134 M) JAN. 12, 1960, FROM FLOODMARK, (BACKWATER FROM ICE); MINIMUM DISCHARGE, 7.1 FT³/S (0.20 M³/S) JAN. 31, 1959, RESULT OF FREEZEUP.

EXTREMES FOR CURRENT YEAR.--PEAK DISCHARGES ABOVE BASE OF 90 FT³/S (2.55 M³/S) AND MAXIMUM (*):

DATE	TIME	DISCHARGE (FT ³ /S)	(M ³ /S)	GAGE HEIGHT (FT)	(M)	DATE	TIME	DISCHARGE (FT ³ /S)	(M ³ /S)	GAGE HEIGHT (FT)	(M)
FEB. 28	0145	239	6.77	5.31	1.618	MAR. 12	1600	238	6.74	5.30	1.615
MAR. 5	0215	*328	*9.29	6.13	1.868						

MINIMUM DAILY DISCHARGE, 12 FT³/S (2.55 M³/S) SEPT. 23-25, 27-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			23	17	17	20	21	19	16	16	18	16
2			20	17	17	19	20	19	16	16	18	15
3			18	17	17	19	20	19	16	16	18	15
4			18	17	17	76	20	19	16	16	18	15
5			18	17	17	176	19	19	16	16	18	15
6			17	17	17	26	19	19	15	16	18	14
7			17	17	17	26	19	18	15	16	18	14
8			17	17	17	25	19	18	15	16	18	14
9			17	17	17	30	19	18	15	16	18	14
10			17	17	18	43	19	18	15	16	18	14
11			17	17	18	32	20	18	15	16	18	14
12			17	17	19	130	19	18	15	16	18	13
13			18	17	18	51	18	18	15	16	19	13
14			19	17	17	22	18	18	16	17	19	13
15			18	17	22	21	20	20	15	17	18	13
16			18	17	19	19	20	22	15	17	18	13
17			17	17	20	19	19	20	15	17	18	13
18			17	17	38	20	19	18	15	17	18	13
19			17	17	23	20	18	18	15	17	17	13
20			17	17	20	21	22	18	15	17	17	13
21			17	17	22	20	40	18	15	17	17	13
22			17	17	19	19	32	17	15	17	17	13
23			17	17	18	19	22	17	16	17	16	12
24			17	17	19	19	28	17	16	17	16	12
25			17	17	28	19	28	17	16	17	16	12
26			17	17	56	20	21	17	16	17	17	13
27			17	17	105	28	20	16	16	18	16	12
28			17	17	127	20	20	16	16	19	17	12
29			17	17	30	21	19	16	16	18	16	12
30			17	17	---	24	19	17	16	18	16	12
31			17	17	---	22	---	16	---	18	16	---
TOTAL			544	527	809	1046	637	558	464	520	540	400
MEAN			17.5	17.0	27.9	33.7	21.2	18.0	15.5	16.8	17.4	13.3
MAX			23	17	127	176	40	22	16	19	19	16
MIN			17	17	17	19	18	16	15	16	16	12
CFSM			1.07	1.04	1.70	2.05	1.29	1.10	.95	1.02	1.06	.81
IN.			1.23	1.20	1.83	2.37	1.44	1.27	1.05	1.18	1.22	.91

05436000 MT VERNON CREEK AT MT VERNON, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--WATER YEARS 1954-60, NOVEMBER 1975 TO SEPTEMBER 1976.

WATER QUALITY DATA, NOVEMBER 1975 TO SEPTEMBER 1976

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 14, 1975	1620	5.5	17.1	-	Apr. 9, 1976	1205	10.5	18.8	480
Jan. 20, 1976	1250	1.0	17.3	460	May 20, 1976	1535	17.5	17.6	500
Feb. 28, 1976	1243	-	83.8	240	July 9, 1976	1150	16.5	16.1	500

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
FEB , 1976				
	17...	1615	18	.61
	25...	1715	33	12
	26...	0730	30	6.7
	26...	1700	75	307
	27...	0715	85	320
	27...	1720	120	492
	28...	0930	164	137
	28...	1245	83	135
	28...	1635	48	117
MAR				
	04...	1515	32	31
	04...	1800	128	196
	05...	0745	218	67
	05...	1530	134	58
	11...	1630	21	34
	12...	0900	88	524
	12...	1230	120	633
	12...	1540	232	284
	12...	2030	191	152
	13...	1045	191	89
	26...	0730	19	42
APR				
	01...	1710	21	14
	09...	0800	19	8
	09...	1215	18	20
	16...	1140	20	20
	21...	0545	36	200
	21...	1645	30	53
	21...	2045	67	43
	22...	0745	32	224
	22...	1700	27	39
	29...	1640	21	29
MAY				
	06...	1015	22	6
	13...	1040	22	9
JUN				
	11...	1430	27	1
AUG				
	10...	0800	19	13
SEP				
	02...	1250	15	14
	28...	1345	12	21

ROCK RIVER BASIN

05436500 SUGAR RIVER NEAR BRODHEAD, WI

LOCATION.--LAT 42°36'42", LONG 89°23'53", IN SW 1/4 SEC.26, T.2 N., R.9 E., GREEN COUNTY, HYDROLOGIC UNIT 07090004, ON LEFT BANK AT DOWNSTREAM SIDE OF HIGHWAY BRIDGE, 1.2 MI (1.9 KM) SOUTHWEST OF BRODHEAD, AND 1.9 MI (3.1 KM) UPSTREAM FROM SYLVESTER CREEK.

DRAINAGE AREA.--523 MI² (1,355 KM²).

PERIOD OF RECORD.--JANUARY 1914 TO CURRENT YEAR. MONTHLY DISCHARGE ONLY FOR JANUARY AND FEBRUARY 1914, PUBLISHED IN WSP 1308.

REVISED RECORD.--WSP 1238: 1914-16, 1918, 1922, 1927, 1933. WSP 1508: 1916-17(M), 1919(M), 1920, 1921(M), 1927-28(M), 1930(M), 1931, 1936(M), 1943(M). WRD WI-71-1: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 768.14 FT (234.129 M) ABOVE MEAN SEA LEVEL. PRIOR TO OCT. 17, 1938, NONRECORDING GAGE AT SAME SITE AND DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR PERIODS OF ICE EFFECT WHICH ARE FAIR.

AVERAGE DISCHARGE.--62 YEARS, 343 FT³/S (9.714 M³/S), 8.91 IN/YR (226 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 14,800 FT³/S (419 M³/S) SEPT. 13, 1915, GAGE HEIGHT, 11.4 FT (3.47 M) FROM FLOODMARKS, FROM RATING CURVE EXTENDED ABOVE 7,500 FT³/S (212 M³/S); MINIMUM, 35 FT³/S (0.99 M³/S) SEPT. 19, 1959, GAGE HEIGHT, -0.16 FT (-0.049 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 2,480 FT³/S (70.2 M³/S) MAR. 7, GAGE HEIGHT, 6.43 FT (1.960 M), NO OTHER PEAK ABOVE BASE OF 1,900 FT³/S (53.8 M³/S); MINIMUM DISCHARGE, 146 FT³/S (4.14 M³/S) SEPT. 15, 16, GAGE HEIGHT, 0.29 FT (0.088 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE-DISCHARGE RELATION AFFECTED BY ICE DEC. 17 TO FEB. 17.)

0.2	130	4.0	1,260
0.5	190	5.0	1,640
1.0	295	6.0	2,170
2.0	589	7.0	3,000
3.0	914		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	253	249	466	220	210	1150	513	373	260	208	186	170
2	257	253	403	210	190	954	478	349	250	203	176	170
3	242	280	400	200	190	707	439	333	244	198	170	170
4	240	300	293	200	190	666	409	325	250	194	170	166
5	242	287	284	190	200	1760	388	328	235	191	170	160
6	238	274	302	190	200	2130	368	445	230	192	172	158
7	238	270	295	190	200	2240	348	413	223	187	170	160
8	240	268	282	180	210	1650	335	371	223	189	167	158
9	242	268	274	180	210	970	322	335	221	187	166	156
10	245	287	270	180	220	675	315	317	217	185	162	154
11	240	291	266	180	240	589	322	307	214	178	160	152
12	240	287	263	190	270	675	335	297	213	175	160	156
13	243	274	266	190	300	825	330	282	218	172	158	158
14	255	266	291	200	320	1000	317	290	236	168	182	150
15	249	261	317	200	300	1210	312	319	241	162	198	148
16	251	261	310	200	320	891	317	406	228	160	194	146
17	245	259	240	200	370	560	330	553	218	162	172	148
18	243	257	260	190	491	472	325	529	215	158	164	152
19	243	255	270	180	653	442	315	405	212	160	170	158
20	243	259	260	190	759	439	312	349	213	164	166	164
21	249	270	250	190	682	439	394	322	201	170	162	166
22	282	272	240	200	460	424	528	301	201	166	160	160
23	251	268	230	200	421	397	586	288	214	166	160	160
24	274	261	220	200	368	383	608	280	255	166	156	158
25	251	257	220	210	445	365	637	263	257	160	158	158
26	261	249	220	210	904	362	599	273	235	153	164	160
27	255	240	220	200	1140	430	573	255	221	152	164	164
28	251	274	220	190	1230	538	473	220	218	178	176	164
29	249	282	220	200	1160	560	387	255	218	193	192	164
30	245	394	220	210	---	519	339	260	212	189	184	163
31	245	---	230	210	---	528	---	265	---	196	172	---
TOTAL	7702	8173	8502	6080	12853	24950	12254	10308	6793	5482	5281	4771
MEAN	248	272	274	196	443	805	408	333	226	177	170	159
MAX	282	394	466	220	1230	2240	637	553	260	208	198	170
MIN	238	240	220	180	190	362	312	220	201	152	156	146
CFSM	.47	.52	.52	.37	.85	1.54	.78	.64	.43	.34	.33	.30
IN.	.55	.58	.60	.43	.91	1.77	.87	.73	.48	.39	.38	.34
CAL YR 1975	TOTAL	159485	MEAN 437	MAX 7290	MIN 220	CFSM .84	IN 11.34					
WTR YR 1976	TOTAL	113149	MEAN 309	MAX 2240	MIN 146	CFSM .59	IN 8.05					

ROCK RIVER BASIN

05437500 ROCK RIVER AT ROCKTON, IL

LOCATION.--LAT 42°26'55", LONG 89°04'11", SW 1/4 NE 1/4 SEC.24, T.46 N., R.1 E., WINNEBAGO COUNTY, HYDROLOGIC UNIT 07090005, ON RIGHT BANK 750 FT (229 M) DOWNSTREAM FROM STATE HIGHWAY 75 IN ROCKTON, 1.0 MI (1.6 KM) DOWNSTREAM FROM PECATONICA RIVER.

DRAINAGE AREA.--6,363 MI² (16,480 KM²).

PERIOD OF RECORD.--JUNE 1903 TO JULY 1906, OCTOBER 1906 TO MARCH 1909, JULY 1914 TO SEPTEMBER 1919, OCTOBER 1939 TO CURRENT YEAR. PUBLISHED AS "BELOW MOUTH OF PECATONICA RIVER AT ROCKTON" 1903-09; AS "AT ROCKTON" 1914-19. MONTHLY DISCHARGE ONLY FOR SOME PERIODS, PUBLISHED IN WSP 1308.

REVISED RECORDS.--WSP 325: 1903-9. WSP 895: 1904(M). WSP 1508: 1915, 1916-17(M). WDR IL-75: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 707.94 FT (215.780 M) ABOVE MEAN SEA LEVEL (LEVELS BY CORPS OF ENGINEERS). PRIOR TO OCT. 1, 1906, NONRECORDING GAGE AT SAME SITE AT DATUM ABOUT 1 FT (0.30 M) HIGHER. OCT. 1, 1906, TO MAR. 31, 1909, NONRECORDING GAGE AT SAME SITE AT DATUM ABOUT 2 FT (0.6 M) HIGHER. JULY 30, 1914, TO APR. 30, 1919, NONRECORDING GAGE AT SITE AT ROCKFORD ABOUT 21 MI (34 KM) DOWNSTREAM, AT DIFFERENT DATUM. OCT. 1, 1939, TO AUG. 10, 1973, AT SITE 800 FT (244 KM) UPSTREAM AT SAME DATUM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, AND THOSE FOR A PERIOD OF NO GAGE HEIGHT RECORD DEC. 11 TO JAN. 13, WHICH ARE POOR. LOW FLOW REGULATED BY POWERPLANT ABOVE STATION.

AVERAGE DISCHARGE.--44 YEARS (1903-05, 1914-19, 1939-76), 3,692 FT³/S (110.2 M³/S), 8.31 IN/YR (211 MM/YR), DISCHARGE FOR SITE AT ROCKFORD ADJUSTED FOR DIFFERENCE IN DRAINAGE AREA.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 32,500 FT³/S (920 M³/S) MAR. 30, 1916, GAGE HEIGHT, 13.06 FT (3.981 M), SITE AND DATUM THEN IN USE; MINIMUM DAILY, 501 FT³/S (14.2 M³/S) SEPT. 14, 1958.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--FLOOD IN FEBRUARY 1937 REACHED A STAGE OF 14.6 FT (4.450 M), BACKWATER FROM ICE, FROM PAINTED FLOODMARK.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 16,700 FT³/S (473 M³/S) MAR. 5, GAGE HEIGHT, 10.45 FT (3.185 M); MINIMUM DAILY, 948 FT³/S (26.8 M³/S) SEPT. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1830	1600	2960	2830	1710	7030	6990	6720	3510	1740	1390	1440
2	1740	1900	3250	2620	1700	7780	6830	6590	3370	1720	1400	1400
3	1660	2050	3280	2450	1640	8480	6900	6520	3280	1690	1340	1370
4	1740	2250	3240	2290	1600	9240	7000	6420	3030	1650	1270	1270
5	1710	2090	3240	2120	1550	15200	7050	6180	2420	1600	1220	1270
6	1690	2380	3540	2130	1540	14800	7000	6350	2120	1520	1190	1300
7	1710	2320	3370	2190	1600	12900	6900	6800	2360	1510	1160	1230
8	1790	2390	3300	2200	1700	13200	6850	6900	2410	1410	1130	1180
9	1760	2350	3300	2190	1720	13400	6560	6550	2540	1590	1110	1280
10	1740	2530	3210	2180	1780	13400	6350	6200	2340	1430	1090	1290
11	1660	2350	3180	2130	1900	12800	6440	5870	2170	1400	1120	1170
12	1760	2540	3120	2100	2110	12400	6330	5760	1880	1380	1150	1050
13	1810	2570	3070	2080	2250	12500	6200	5510	2000	1440	1250	1240
14	1720	2600	2970	2060	2220	12100	6050	5380	2350	1380	1240	1190
15	1730	2520	3250	2020	2390	11700	5850	5330	2370	1360	1340	1080
16	1750	2370	3650	1900	2570	11500	5700	5330	2100	1340	1360	1190
17	1850	2390	3800	1850	3170	11300	5600	5870	2050	1300	1450	1130
18	2080	2410	3700	1800	3700	11200	5650	5850	2170	1280	1280	1110
19	2030	2370	4900	1750	4170	10600	5700	5440	2110	1270	1280	1080
20	1900	2410	4800	1700	4600	10100	5900	5310	2060	1290	1310	1160
21	1810	2530	4600	1650	5000	8730	6200	5200	2030	1300	1340	1140
22	1870	2410	4300	1700	4880	8480	6900	4940	1890	1330	1280	1140
23	1910	2400	3960	1730	4660	8130	7300	4680	2030	1340	1170	1020
24	1900	2400	3680	1750	4570	8020	8300	4590	2110	1330	1200	1090
25	1940	2530	3440	1750	4970	8100	8150	4330	2120	1300	1150	1130
26	1800	2200	3280	1760	6440	7920	7800	4140	1940	1280	1350	1170
27	1910	2260	3150	1770	6230	7870	7320	3940	1870	1310	1480	1280
28	1930	2230	3050	1780	6450	7850	7260	3840	1870	1390	1420	948
29	1930	2320	3200	1760	6730	7720	7200	3750	1740	1440	1450	1250
30	2020	3140	3130	1740	---	7320	6950	3690	1760	1470	1400	1000
31	1970	---	3080	1720	---	7120	---	3590	---	1400	1350	---
TOTAL	56650	70810	108000	61700	95550	318890	201230	167570	68000	44190	39670	35598
MEAN	1827	2360	3484	1990	3295	10290	6708	5405	2267	1425	1280	1187
MAX	2080	3140	4900	2830	6730	15200	8300	6900	3510	1740	1480	1440
MIN	1660	1600	2960	1650	1540	7030	5600	3590	1740	1270	1090	948
CFSM	.29	.37	.55	.31	.52	1.62	1.05	.85	.36	.22	.20	.19
IN.	.33	.41	.63	.36	.56	1.86	1.18	.98	.40	.26	.23	.21
CAL YR 1975	TOTAL	1868940	MEAN	5120	MAX	29700	MIN	1600	CFSM	.80	IN	10.93
WTR YR 1976	TOTAL	1267858	MEAN	3464	MAX	15200	MIN	948	CFSM	.54	IN	7.41

ILLINOIS RIVER BASIN

05527800 DES PLAINES RIVER AT RUSSELL, IL

LOCATIONIDN.--LAT 42°29'22", LONG 87°55'32", IN SE 1/4 SEC.3, T.46 N., R.11 E., LAKE COUNTY, HYDROLOGIC UNIT 07120004, AT CENTER ON DOWNSTREAM SIDE OF BRIDGE ON RUSSELL ROAD, 0.3 MI (0.5 KM) WEST OF RUSSELL, 7.2 MI (11.6 KM) UPSTREAM FROM MILL CREEK, AND AT MILE 109.14 (175.61 KM).

DRAINAGE AREA.--123 MI² (319 KM²).

PERIOD OF RECORD.--OCCASIONAL LOW-FLOW MEASUREMENTS, WATER YEARS 1961-63, AND ANNUAL MAXIMUM STAGES, WATER YEARS 1962-66, JUNE 1967 TO CURRENT YEAR.

REVISED RECORDS.--WDR IL-75: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 662.00 FT (201.778 M) ABOVE MEAN SEA LEVEL. OCT. 17, 1961, TO JUNE 29, 1967, CREST-STAGE GAGE AT LEFT DOWNSTREAM SIDE OF BRIDGE AT DATUM 4.29 FT (1.308 M) HIGHER.

REMARKS.--RECORDS FAIR EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE POOR.

AVERAGE DISCHARGE.--9 YEARS, 97.1 FT³/S (2.750 M³/S), 10.72 IN/YR (272 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 1,990 FT³/S (56.4 M³/S) MAR. 6, 1976, GAGE HEIGHT, 10.75 FT (3.277 M); NO FLOW AT TIMES DURING SEVERAL YEARS.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 1,990 FT³/S (56.4 M³/S) MAR. 6, GAGE HEIGHT, 10.75 FT (3.277 M); MINIMUM, 0.14 FT³/S (0.004 M³/S) SEPT. 16.

REVISIONS.--THE MAXIMUM DISCHARGES FOR SOME WATER YEARS HAVE BEEN REVISED, AS SHOWN IN THE FOLLOWING TABLE. THEY SUPERSEDE FIGURES PUBLISHED IN WSP 2115 AND THE REPORT FOR 1973.

WATER YEAR	DATE	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)	WATER YEAR	DATE	DISCHARGE (FT ³ /S) (M ³ /S)	GAGE HEIGHT (FT) (M)
1960	APR. 2, 1960	A1320 37.4	9.69 2.954	1965	APR. 6, 1965	A600 17.0	7.53 2.295
1961	MAR. 19, 1961	A425 12.0	UNKNOWN	1966	FEB. 10, 1966	A740 21.0	8.41 2.563
1962	MAR. 22, 1962	A820 23.2	8.21 2.502	1967	JUNE 10, 1967	720 20.4	8.35 2.545
1963	APR. 30, 1963	A104 2.95	3.99 1.216	1968	JULY 1, 1968	235 6.66	6.01 1.832
1964	APR. 5, 1964	A157 4.45	4.95 1.509	1973	APR. 23, 1973	940 26.6	7.74 2.359

A NOT PREVIOUSLY PUBLISHED.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	3.2	63	11	3.1	278	492	503	76	11	5.5	1.9
2	2.3	3.2	67	9.5	3.0	286	442	428	64	10	7.5	1.3
3	2.3	3.7	50	8.0	2.9	379	385	362	52	8.9	6.6	1.5
4	2.1	4.0	30	6.6	2.9	496	331	299	41	7.7	7.7	1.9
5	2.2	4.0	22	5.2	2.8	1310	280	252	34	6.6	7.1	1.6
6	2.2	3.9	18	4.4	2.8	1940	235	235	27	4.9	4.7	1.2
7	2.4	4.0	15	4.3	2.7	1730	197	231	22	4.9	3.6	1.0
8	2.4	3.6	14	4.2	2.7	1410	164	248	19	5.5	2.8	1.1
9	2.5	4.7	12	4.1	2.9	1100	138	258	16	5.9	3.2	1.2
10	2.4	6.8	11	4.0	3.8	839	115	245	14	5.7	4.2	.90
11	2.2	7.5	11	3.9	5.4	664	103	218	14	3.9	4.6	.60
12	2.6	8.4	11	3.9	7.2	577	97	183	13	3.7	3.4	.40
13	2.7	7.4	12	3.7	10	514	90	155	12	4.0	2.7	.30
14	2.6	6.3	23	3.6	15	458	81	130	28	3.2	4.0	.20
15	4.0	6.1	65	3.5	23	413	80	113	31	3.6	4.0	.21
16	3.4	5.7	96	3.3	46	372	143	122	32	3.2	2.8	.16
17	3.3	5.5	91	3.4	70	325	148	126	28	3.9	2.8	.30
18	3.5	5.6	79	3.3	91	287	138	127	23	3.6	3.6	.84
19	3.0	5.4	61	3.2	138	254	119	116	19	3.4	3.0	.56
20	2.9	5.4	41	3.2	149	226	98	100	21	3.9	2.2	.44
21	2.7	5.4	32	3.3	153	201	89	85	25	4.4	1.8	.39
22	3.4	5.2	26	3.3	154	173	87	72	19	4.0	1.5	.43
23	3.4	5.4	22	3.3	149	151	86	60	18	3.4	1.1	.93
24	3.0	5.5	19	3.3	148	132	129	53	19	4.6	1.0	1.1
25	3.2	4.9	17	3.4	182	113	380	47	19	3.2	1.6	.67
26	3.3	4.4	15	3.4	210	102	628	41	19	3.1	1.8	.82
27	3.5	4.6	14	3.4	239	171	843	36	15	2.5	1.5	1.1
28	3.3	4.8	12	3.3	262	293	820	32	13	2.8	1.8	1.2
29	3.8	6.3	11	3.3	279	423	698	39	12	3.6	1.8	1.4
30	3.5	23	11	3.2	---	507	589	52	12	3.4	1.8	1.4
31	3.1	---	12	3.1	---	531	---	81	---	4.7	1.9	---
TOTAL	89.7	173.9	983	132.6	2360.2	16655	8225	5051	757	147.2	103.6	27.05
MEAN	2.89	5.60	31.7	4.28	81.4	537	274	163	25.2	4.75	3.34	.90
MAX	4.0	23	96	11	279	1940	843	503	76	11	7.7	1.9
MIN	2.1	3.2	11	3.1	2.7	102	80	32	12	2.5	1.0	.16
CFSM	.02	.05	.26	.03	.66	4.37	2.23	1.33	.20	.04	.03	.007
IN.	.03	.05	.30	.04	.71	5.04	2.49	1.53	.23	.04	.03	.008
CAL YR 1975	TOTAL	20220.00	MEAN	55.4	MAX	397	MIN	1.8	CFSM	.45	IN	6.12
WTR YR 1976	TOTAL	34705.25	MEAN	94.8	MAX	1940	MIN	.16	CFSM	.77	IN	10.50

05543B30 FOX RIVER AT WAUKESHA, WI

LOCATION.--LAT 43°00'17", LONG 88°14'37". IN SW 1/4 SEC.3, T.6 N., R.18 E., WAUKESHA COUNTY, HYDROLOGIC UNIT 07120006, ON LEFT BANK 20 FT (6.10 M) DOWNSTREAM FROM PRAIRIE STREET BRIDGE IN WAUKESHA, 1.0 MI (1.6 KM) DOWNSTREAM FROM DAM AND 3.2 MI (5.1 KM) DOWNSTREAM FROM PEWAUKEE RIVER.

DRAINAGE AREA.--127 MI² (329 KM²).

PERIOD OF RECORD.--JANUARY 1963 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 793.04 FT (241.719 M) ABOVE MEAN SEA LEVEL (LEVELS BY CITY OF WAUKESHA).

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR. OCCASIONAL REGULATIDN FROM MILL DAM 1.0 MI (1.6 KM) UPSTREAM.

AVERAGE DISCHARGE.--13 YEARS, 90.5 FT³/S (2.563 M³/S), 9.68 IN/YR (246 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 2,260 FT³/S (64.0 M³/S) APR. 22, 1973, GAGE HEIGHT, 7.42 FT (2.262 M); MINIMUM, 3.0 FT³/S (0.085 M³/S) JAN. 1, 1964, GAGE HEIGHT, 1.52 FT (0.463 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 1,080 FT³/S (30.6 M³/S) MAR. 5, GAGE HEIGHT, 5.51 FT (1.679 M); MINIMUM, 13 FT³/S (0.37 M³/S) AUG. 22, GAGE HEIGHT, 1.87 FT (0.570 M).

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(STAGE DISCHARGE RELATION AFFECTED BY ICE JAN. 27, 28, FEB. 1-4.)

1.8	14	3.0	173
1.9	20	4.0	450
2.2	44	5.0	820
2.5	86	6.0	1,320

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	24	160	60	42	271	306	246	101	40	31	26
2	30	36	124	60	42	273	273	213	90	36	26	24
3	29	52	103	54	42	326	241	188	77	32	23	23
4	27	56	101	48	40	489	211	170	65	30	18	21
5	26	46	87	49	39	920	188	199	58	38	18	21
6	26	40	81	48	38	930	181	312	52	38	17	19
7	26	37	71	47	40	896	150	340	48	28	18	19
8	26	38	66	46	42	665	148	284	46	28	18	21
9	29	41	62	46	41	543	156	228	43	30	19	26
10	28	74	55	44	43	459	150	197	41	27	19	25
11	26	74	51	44	46	379	152	172	43	25	19	24
12	25	61	50	43	58	388	150	156	41	23	18	18
13	27	48	62	42	101	459	142	146	55	22	19	18
14	35	43	116	42	89	446	138	189	121	20	25	18
15	40	40	137	42	124	421	144	156	123	23	18	17
16	32	38	119	40	204	391	152	204	101	23	28	18
17	29	38	72	40	218	343	142	204	70	22	18	17
18	27	39	61	39	282	303	133	179	64	20	17	19
19	26	41	52	38	317	273	121	162	62	19	18	22
20	26	44	52	38	287	257	116	144	60	21	18	19
21	27	42	48	41	244	233	128	121	58	21	16	18
22	27	41	93	41	197	201	166	101	56	24	17	19
23	28	38	54	39	177	199	164	92	60	25	21	28
24	31	36	50	38	186	190	241	87	56	20	26	19
25	30	33	46	38	206	164	459	81	52	19	23	18
26	27	33	47	42	268	183	543	71	50	19	20	17
27	26	33	50	42	287	317	505	63	47	20	23	18
28	26	37	50	42	284	385	434	75	43	30	48	16
29	25	83	52	42	282	343	352	101	48	24	29	17
30	24	183	52	40	---	349	292	114	45	33	24	17
31	24	---	56	40	---	343	---	186	---	35	20	---
TOTAL	867	1469	2280	1355	4266	12339	6678	5021	1868	799	664	594
MEAN	28.0	49.0	73.5	43.7	147	398	223	162	62.3	25.8	21.4	19.8
MAX	40	183	160	60	317	930	543	340	123	48	48	26
MIN	24	24	46	38	38	164	116	63	40	19	16	16
CFSM	.22	.39	.58	.34	1.16	3.13	1.76	1.28	.49	.20	.17	.16
IN.	.25	.43	.67	.40	1.25	3.61	1.96	1.47	.55	.23	.19	.17
CAL YR 1975	TOTAL	43271	MEAN 119	MAX 1140	MIN 24	CFSM .94	IN 12.67					
WTR YR 1976	TOTAL	38200	MEAN 104	MAX 930	MIN 16	CFSM .82	IN 11.19					

ILLINOIS RIVER BASIN

05544200 MUKWONAGO RIVER AT MUKWONAGO, WI

LOCATION.--LAT 42°51'24", LONG 88°19'40", IN NE 1/4 NE 1/4 SEC.35, T.5 N., R.18 E., WAUKESHA COUNTY, HYDROLOGIC UNIT 07120006, ON LEFT BANK 100 FT (30 M) UPSTREAM FROM BRIDGE ON STATE HIGHWAY 83 IN MUKWONAGO, 100 FT (30 M) DOWNSTREAM FROM RAILROAD BRIDGE, AND 800 FT (244 M) DOWNSTREAM FROM DAM.

DRAINAGE AREA.--76.2 MI² (197.4 KM²).

PERIOD OF RECORD.--JULY 1973 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. ALTITUDE OF GAGE IS 800 FT (244 M), FROM TOPOGRAPHIC MAP.

REMARKS.--RECORDS GOOD. DISCHARGE AFFECTED BY MANIPULATION OF GATES AT DAMS 800 FT (244 M) AND 11.4 MI (18.3 KM) UPSTREAM, IN RESPONSE TO CHANGES IN STAGE OF RECREATION LAKES.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 300 FT³/S (8.50 M³/S) MAR. 5, 1976, GAGE HEIGHT, 2.50 FT (0.762 M); MINIMUM DAILY, 1.8 FT³/S (0.051 M³/S) DEC. 23, 1975.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 300 FT³/S (8.50 M³/S) MAR. 5, GAGE HEIGHT, 2.50 FT (0.762 M); MINIMUM DAILY, 1.8 FT³/S (0.051 M³/S) DEC. 23.

RATING TABLES (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).

OCT. 1 TO MAR. 5				MAR. 6 TO SEPT. 30			
0.9	1.1	1.4	32	1.0	3.6	1.5	56
1.0	2.8	1.5	48	1.1	8.5	1.7	95
1.1	6.0	1.7	87	1.2	14	2.0	164
1.2	12	2.0	160	1.3	24	2.6	330
1.3	20	2.5	305	1.4	39		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	31	132	33	36	87	105	84	82	39	28	24
2	9.3	31	137	61	33	94	66	87	88	36	28	24
3	13	36	122	64	34	103	52	78	100	20	27	26
4	14	40	103	53	34	157	54	70	70	18	26	23
5	17	53	39	50	34	269	56	68	60	20	26	22
6	18	52	15	45	31	227	54	72	54	21	24	21
7	18	48	19	45	31	205	39	78	47	22	26	20
8	19	45	24	42	33	194	36	78	39	22	27	20
9	30	42	29	42	31	74	39	74	39	21	26	28
10	42	87	33	42	33	37	42	72	10	20	23	27
11	36	83	47	22	34	56	46	72	14	17	22	27
12	31	85	53	14	36	154	51	76	16	18	22	27
13	31	87	52	16	66	186	51	70	26	19	22	26
14	29	81	83	18	81	125	57	54	41	19	37	24
15	33	72	98	21	83	65	78	30	76	18	37	24
16	30	36	108	25	89	65	116	42	84	17	36	24
17	27	21	89	25	87	70	110	97	76	16	37	22
18	27	21	81	27	81	70	99	105	74	15	34	23
19	27	15	74	30	76	68	37	95	70	14	30	24
20	27	15	72	31	62	70	2.8	89	54	17	26	27
21	26	22	37	34	52	63	9.1	56	23	17	26	27
22	26	26	9.3	33	57	57	20	44	17	18	26	24
23	27	34	1.8	33	57	56	49	49	22	19	23	23
24	33	39	3.0	34	61	57	70	54	28	19	22	22
25	43	39	6.0	34	81	57	121	56	34	18	23	20
26	45	37	12	36	101	70	159	54	42	18	23	20
27	40	39	18	34	96	125	144	49	34	17	22	21
28	34	37	20	34	94	125	101	49	34	19	28	22
29	31	61	24	36	91	110	76	80	44	22	23	22
30	29	120	29	36	---	105	74	88	42	22	24	21
31	27	---	30	36	---	98	---	82	---	27	24	---
TOTAL	846.9	1435	1600.1	1086	1715	3299	2015.9	2152	1440	625	828	705
MEAN	27.3	47.8	51.6	35.0	59.1	106	67.2	69.4	48.0	20.2	26.7	23.5
MAX	45	120	137	64	101	269	159	105	100	39	37	28
MIN	7.6	15	1.8	14	31	37	2.8	30	10	14	22	20
CFSM	.36	.63	.68	.46	.78	1.39	.88	.91	.63	.27	.35	.31
IN.	.41	.70	.78	.53	.84	1.61	.98	1.05	.70	.31	.40	.34
CAL YR 1975 TOTAL	26541.1			MEAN 72.7	MAX 236	MIN 1.8	CFSM .95	IN 12.96				
WTR YR 1976 TOTAL	17747.9			MEAN 48.5	MAX 269	MIN 1.8	CFSM .64	IN 8.66				

05545000 NORTH LAKE NEAR ELKHORN, WI

LOCATION.--LAT 42°44'38", LONG 88°37'45", IN SE 1/4 SEC.S, T.3 N., R.16 E., WALWORTH COUNTY, HYDROLOGIC UNIT 07120006, ATTACHED TO POST IN LAKE NEAR END OF BARKER ROAD AT SOUTH END OF LAKE, 6.5 MI (10.5 KM) NORTHWEST OF ELKHORN.

DRAINAGE AREA.--1.0 MI² (2.59 KM²), APPROXIMATELY. AREA OF NORTH LAKE, 350 ACRES (1.42 KM²), APPROXIMATELY, AT HIGH STAGE.

PERIOD OF RECORD.--MAY 1937 TO CURRENT YEAR (FRAGMENTARY). PUBLISHED AS HOLDEN LAKE PRIOR TO OCTOBER 1958.

GAGE.--NONRECORDING GAGE READ ABOUT ONCE WEEKLY OR MORE OFTEN EXCEPT DURING WINTER. ALTITUDE OF GAGE IS 900 FT (274 M), FROM TOPOGRAPHIC MAP.

REMARKS.--LAKE HAS NO SURFACE OUTLET. LAKE ICE COVERED DEC. 7 TO MAR. 13.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM GAGE HEIGHT OBSERVED, 15.62 FT (4.761 M) JUNE 10, 22, 1974; LAKE DRY FOR PARTS OF PERIOD JULY TO DECEMBER 1958.

EXTREMES FOR CURRENT YEAR.--MAXIMUM GAGE HEIGHT OBSERVED, 13.34 FT (4.066 M) MAR. 31; MINIMUM OBSERVED, 10.89 FT (3.319 M) SEPT. 25.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	12.66	---	---	---	---	---	13.23	---	---	---	---
2	---	---	12.65	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	13.32	13.18	---	---	---	---
4	13.01	---	---	---	---	---	---	---	---	---	---	---
5	---	12.51	---	---	---	---	---	---	---	---	---	---
6	---	---	12.56	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	12.66	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	13.24	---	---	---	---	---
11	12.81	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	12.56	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	13.19	---	---	---	---	---
18	12.76	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	12.31	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	11.18	---
22	---	12.56	---	---	---	---	---	---	---	---	---	10.94
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	13.24	---	---	---	---	---
25	12.66	---	---	---	---	---	---	---	---	---	---	10.89
26	---	---	---	---	12.03	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	12.61	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	12.10	---	---
31	---	---	---	---	---	13.34	---	---	---	---	---	---

ILLINOIS RIVER BASIN

05545300 WHITE RIVER NEAR BURLINGTON, WI

LOCATION.--LAT 42°39'57", LONG 88°19'03", IN NE 1/4 NW 1/4 SEC.1, T.2 N., R.18 E., IN WALWORTH COUNTY, HYDROLOGIC UNIT 07120006, ON RIGHT BANK 10 FT (3 M) DOWNSTREAM FROM BRIDGE ON STATE HIGHWAY 36, 2.2 MI (3.5 KM) SOUTHWEST OF BURLINGTON AND 3.4 MI (5.5 KM) UPSTREAM FROM MOUTH.

DRAINAGE AREA.--97.5 MI² (253 KM²).

PERIOD OF RECORD.--ANNUAL MAXIMUM, WATER YEARS 1958-64, 1967-73; AUGUST 1964 TO SEPTEMBER 1966 NO WINTER RECORDS; APRIL 1973 TO CURRENT YEAR.

GAGE.--WATER-STAGE RECORDER. DATUM OF GAGE IS 757.43 FT (230.865 M) ABOVE MEAN SEA LEVEL.

REMARKS.--RECORDS ARE FAIR.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 1,960 FT³/S (53.8 M³/S) JULY 18, 1969, GAGE HEIGHT, 13.59 FT (4.142 M); MINIMUM RECORDED, 2.3 FT³/S (0.065 M³/S) JULY 4, 1965, GAGE HEIGHT, 7.79 FT (2.374 M).

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 1,140 FT³/S (32.3 M³/S) MAR. 5, GAGE HEIGHT, 13.25 FT (4.039 M), NO OTHER PEAK ABOVE BASE OF 500 FT³/S (14.2 M³/S); MINIMUM DAILY, 12 FT³/S (0.34 M³/S) SEPT. 14, 23, 24.

RATING TABLE (GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND).
(SHIFTING-CONTROL METHOD USED JUNE 9-23; STAGE-DISCHARGE RELATION AFFECTED BY ICE JAN. 12 TO FEB. 26.)

7.9	10	10.0	240
8.1	19	11.0	374
8.3	32	12.0	600
8.6	62	13.0	1,000
9.0	112		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	20	81	36	28	122	167	210	135	28	22	17
2	24	21	48	36	27	183	184	199	116	25	18	17
3	23	22	40	32	27	295	192	176	90	23	17	15
4	23	22	35	34	26	329	180	166	72	22	16	14
5	22	22	34	33	26	995	155	164	60	21	16	14
6	22	22	36	32	27	682	139	272	50	21	16	14
7	21	22	30	31	28	516	126	228	45	20	17	14
8	22	21	28	31	28	394	117	187	50	19	16	13
9	21	23	29	29	29	338	112	160	66	21	16	14
10	23	31	29	30	30	307	100	141	45	19	16	15
11	22	26	28	29	32	286	92	108	46	17	15	14
12	22	23	28	29	35	307	82	84	42	16	16	13
13	22	23	36	28	45	359	76	76	42	15	16	13
14	22	22	98	28	40	298	62	76	166	14	24	12
15	24	22	87	27	50	253	64	95	124	16	22	13
16	23	22	64	27	60	222	87	149	84	17	17	13
17	23	21	52	26	70	197	75	164	62	16	16	13
18	22	22	39	26	80	184	69	125	56	14	16	14
19	22	21	34	26	100	186	64	107	56	15	16	13
20	22	24	33	25	92	182	56	98	45	19	15	15
21	23	28	34	27	90	165	64	90	38	17	15	14
22	23	26	33	28	84	146	80	80	36	16	15	13
23	22	24	33	26	76	133	76	73	38	18	14	12
24	21	23	31	25	90	118	110	66	37	16	15	12
25	21	23	32	26	130	91	250	61	35	16	14	13
26	21	23	31	27	170	100	400	59	33	15	20	14
27	20	24	30	28	152	232	350	58	31	14	16	16
28	19	24	29	28	139	229	300	62	29	20	34	14
29	18	34	28	29	133	179	250	188	30	21	24	13
30	18	141	32	28	---	171	230	179	32	22	18	14
31	18	---	35	27	---	163	---	159	---	29	16	---
TOTAL	674	822	1237	894	1944	8362	4309	4062	1791	582	544	415
MEAN	21.7	27.4	39.9	28.8	67.0	270	144	131	59.7	18.8	17.5	13.8
MAX	25	141	98	36	170	995	400	272	166	29	34	17
MIN	18	20	28	25	26	91	56	58	29	14	14	12
CFSM	.22	.28	.41	.30	.69	2.77	1.48	1.34	.61	.19	.18	.14
IN.	.26	.31	.47	.34	.74	3.19	1.64	1.55	.68	.22	.21	.16
CAL YR 1975 TOTAL	30893			MEAN 84.6	MAX 662	MIN 18	CFSM .67	IN 11.79				
WTR YR 1976 TOTAL	25636			MEAN 78.0	MAX 995	MIN 12	CFSM .72	IN 9.78				

ILLINOIS RIVER BASIN

447

05545550 ROCKLAND LAKE NEAR BURLINGTON, WI

LOCATION.--LAT 42°40'34", LONG 88°14'57", IN NE 1/4 SE 1/4 SEC.33, T.3 N., R.19 E., RACINE COUNTY, HYDROLOGIC UNIT 07120006, ABOUT 0.8 MI (1.3 KM) EAST OF BURLINGTON AT CAMP MACLEAN.

DRAINAGE AREA.--0.99 MI² (2.56 KM²). AREA OF ROCKLAND LAKE, 45 ACRES (0.18 KM²).

PERIOD OF RECORD.--JANUARY 1967 TO CURRENT YEAR.

GAGE.--NONRECORDING GAGE. ALTITUDE OF GAGE IS 758 FT (231 M), FROM TOPOGRAPHIC MAP.

REMARKS.--LAKE ICE COVERED DEC. 7-14 AND DEC. 20 TO MAR. 13.

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM GAGE HEIGHT OBSERVED, 5.58 FT (1.701 M) JULY 30, 1969; MINIMUM GAGE HEIGHT OBSERVED, 4.26 FT (1.298 M) NOV. 22, 25, 1975.

EXTREMES FOR CURRENT YEAR.--MAXIMUM GAGE HEIGHT OBSERVED, 5.38 FT (1.640 M) MAY 19; MINIMUM OBSERVED, 4.26 FT (1.298 M) NOV. 22, 25.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	5.14	---	---	---	---	4.49
3	---	---	---	4.53	---	---	---	---	5.24	---	---	---
4	4.39	---	---	---	4.68	4.85	---	---	---	---	4.72	---
5	---	4.34	---	---	---	---	---	---	---	---	---	---
6	---	---	4.38	---	---	---	---	---	---	4.87	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	4.39	---	---	---	---	5.29	---	---	---	---
9	4.38	---	---	---	---	---	5.06	---	---	---	---	---
10	---	---	---	4.53	4.72	---	---	---	5.14	---	---	---
11	---	4.30	---	---	---	4.96	---	---	---	---	4.58	4.43
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	4.63	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	5.04	5.34	---	---	---	---
16	4.36	---	---	---	4.77	---	---	---	5.12	4.81	---	---
17	---	---	---	4.58	---	---	---	---	---	---	---	4.38
18	---	---	4.41	---	---	4.96	---	---	---	---	4.58	---
19	---	---	---	---	---	---	---	5.38	---	4.89	---	---
20	---	---	---	---	---	---	---	---	---	4.74	4.57	---
21	---	---	---	4.60	---	---	---	---	---	---	---	---
22	---	4.26	---	---	---	---	---	---	---	---	---	4.34
23	---	---	---	---	---	---	5.06	---	---	---	---	4.34
24	---	---	4.43	---	---	---	---	---	---	---	---	---
25	---	4.26	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	4.68	---	---	---	5.10	---	---	---
27	---	---	---	---	---	5.06	---	---	---	---	---	---
28	---	---	---	---	---	---	5.25	---	---	---	4.57	---
29	---	---	---	---	---	---	5.25	5.33	---	---	---	4.34
30	---	---	---	---	---	5.12	---	---	5.10	---	---	---
31	---	---	4.45	4.60	---	---	---	---	---	4.85	---	---

ILLINOIS RIVER BASIN

05546500 FOX RIVER AT WILMOT, WI

LOCATION.--LAT 42°30'40", LONG 88°10'45", IN SW 1/4 SEC.30, T.1 N., R.20 E., KENOSHA COUNTY, HYDROLOGIC UNIT 07120006, ON RIGHT BANK 100 FT (30 M) DOWNSTREAM FROM BRIDGE DN COUNTY TRUNK HIGHWAY C, 300 FT (90 M) UPSTREAM FROM WILMOT DAM, 1.0 MI (1.6 KM) NORTH OF WISCONSIN-ILLINOIS STATE LINE, AND 6.0 MI (9.6 KM) UPSTREAM FROM FOX CHAIN OF LAKES.

DRAINAGE AREA.--868 MI² (2,248 KM²).

PERIOD OF RECORD.--OCTOBER 1939 TO CURRENT YEAR.

REVISED RECORD.--WSP 1308: 1943(M), 1945(M). WRD WIS. 1967: DRAINAGE AREA.

GAGE.--WATER-STAGE RECORDER AND CONCRETE DAM. DATUM OF GAGE IS 735.22 FT (224.095 M) ABOVE MEAN SEA LEVEL. PRIOR TO SEPT. 1, 1956, NONRECORDING GAGE AND CONCRETE DAM.

REMARKS.--RECORDS GOOD EXCEPT THOSE FOR WINTER PERIODS, WHICH ARE FAIR. THREE 6 FT (1.8 M) LIFT GATES IN WILMOT DAM WERE IN OPERATION DURING THE YEAR; DISCHARGE THROUGH GATES COMPUTED BY WEIR AND ORIFICE FORMULAS AND ADDED TO FLOW OVER DAM.

AVERAGE DISCHARGE.--37 YEARS, 507 FT³/S (14.36 M³/S), 7.93 IN/YR (201 MM/YR).

EXTREMES FOR PERIOD OF RECORD.--MAXIMUM DISCHARGE, 7,520 FT³/S (213 M³/S) MAR. 31, 1960, GAGE HEIGHT, 9.25 FT (2.819 M). FROM GRAPH BASED ON GAGE READINGS; NO FLOW PART OF DAY OCT. 26, 1945; MINIMUM DAILY DISCHARGE, 35 FT³/S (0.99 M³/S) SEPT. 9, 1958.

EXTREMES FOR CURRENT YEAR.--MAXIMUM DISCHARGE, 3,700 FT³/S (105 M³/S) MAR. 6, GAGE HEIGHT, 7.90 FT (2.408 M); MINIMUM DAILY, 120 FT³/S (3.40 M³/S) OCT. 6, JULY 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	GCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158	208	561	321	210	1200	1520	1400	747	240	209	158
2	187	234	575	316	210	1290	1440	1330	726	220	208	158
3	259	244	521	260	210	1590	1370	1250	674	200	204	150
4	189	257	533	240	200	1960	1290	1170	618	180	204	146
5	131	265	595	240	200	2870	1210	1060	560	180	207	144
6	120	266	634	240	200	3620	1130	1200	550	180	205	136
7	159	257	562	230	210	3650	1070	1450	465	170	204	127
8	171	281	419	230	210	3500	971	1330	435	170	202	121
9	169	292	399	230	220	3250	869	1200	396	180	192	127
10	172	277	375	220	230	2980	789	1120	350	160	179	154
11	175	303	366	220	250	2680	774	1110	302	150	169	158
12	202	339	356	220	280	2420	740	1060	297	140	157	142
13	194	383	366	210	425	2320	655	987	284	130	155	131
14	176	329	444	210	472	2270	636	854	448	120	189	131
15	183	307	634	210	515	2130	630	760	726	140	188	133
16	199	273	634	200	540	1980	667	923	674	140	173	138
17	210	241	455	200	727	1810	667	1200	630	130	162	138
18	218	248	354	200	803	1640	655	1240	571	120	158	138
19	223	240	386	190	979	1530	655	1160	589	120	155	138
20	207	245	350	190	1020	1460	655	1030	533	130	151	152
21	187	266	400	200	963	1430	630	907	455	130	150	155
22	178	279	380	210	995	1360	655	781	356	140	146	146
23	179	254	360	220	995	1200	661	649	636	140	142	144
24	186	250	340	210	955	1040	774	612	680	130	138	142
25	198	250	320	210	1000	987	1540	566	649	130	138	142
26	191	224	300	210	1110	955	2040	560	624	130	141	155
27	216	221	280	210	1330	1250	2080	527	310	140	144	163
28	210	246	270	210	1390	1680	1900	491	280	140	168	158
29	201	268	260	220	1290	1750	1690	577	250	150	186	152
30	179	464	260	220	---	1620	1530	713	270	160	171	147
31	186	---	270	220	---	1590	---	733	---	193	160	---
TOTAL	5813	8211	12959	6917	18139	61012	31893	29950	15085	4783	5355	4324
MEAN	188	274	418	223	625	1968	1063	966	503	154	173	144
MAX	259	464	634	321	1390	3650	2080	1450	747	240	209	163
MIN	120	208	260	190	200	955	630	491	250	120	138	121
CFSM	.22	.32	.48	.26	.72	2.27	1.22	1.11	.58	.18	.20	.17
IN.	.25	.35	.56	.30	.78	2.61	1.37	1.28	.65	.20	.23	.19

CAL YR 1975 TOTAL 228434 MEAN 626 MAX 2820 MIN 120 CFSM .72 IN 9.79
WTR YR 1976 TOTAL 204441 MEAN 559 MAX 3650 MIN 120 CFSM .64 IN 8.76

AS THE NUMBER OF STREAMS ON WHICH STREAMFLOW INFORMATION IS LIKELY TO BE DESIRED FAR EXCEEDS THE NUMBER OF STREAM-GAGING STATIONS FEASIBLE TO OPERATE AT ONE TIME, THE GEOLOGICAL SURVEY COLLECTS LIMITED STREAMFLOW DATA AT SITES OTHER THAN STREAM-GAGING STATIONS. WHEN LIMITED STREAMFLOW DATA ARE COLLECTED ON A SYSTEMATIC BASIS OVER A PERIOD OF YEARS FOR USE IN HYDROLOGIC ANALYSES, THE SITE AT WHICH THE DATA ARE COLLECTED IS CALLED A PARTIAL-RECORD STATION. DATA COLLECTED AT THESE PARTIAL-RECORD STATIONS ARE USABLE IN LOW-FLOW OR FLOOD-FLOW ANALYSES, DEPENDING ON THE TYPE OF DATA COLLECTED. IN ADDITION, DISCHARGE MEASUREMENTS ARE MADE AT OTHER SITES NOT INCLUDED IN THE PARTIAL-RECORD PROGRAM. THESE MEASUREMENTS ARE GENERALLY MADE IN TIMES OF DROUGHT OR FLOOD TO GIVE BETTER AREAL COVERAGE TO THOSE EVENTS. THOSE MEASUREMENTS AND OTHERS COLLECTED FOR SOME SPECIAL REASON ARE CALLED MEASUREMENTS AT MISCELLANEOUS SITES. RECORDS COLLECTED AT PARTIAL-RECORD STATIONS ARE PRESENTED IN TWO TABLES. THE FIRST IS A TABLE OF DISCHARGE MEASUREMENTS AT LOW-FLOW PARTIAL-RECORD STATIONS AND THE SECOND IS A TABLE OF ANNUAL MAXIMUM STAGE AND DISCHARGE AT CREST-STATIONS. DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES FOR BOTH LOW FLOW AND HIGH FLOW ARE GIVEN IN A THIRD TABLE.

LOW-FLOW PARTIAL-RECORD STATIONS

MEASUREMENTS OF STREAMFLOW IN THE AREA COVERED BY THIS REPORT MADE AT LOW-FLOW PARTIAL-RECORD STATIONS ARE GIVEN IN THE FOLLOWING TABLE. MOST OF THESE MEASUREMENTS WERE MADE DURING PERIODS OF BASE FLOW WHEN STREAMFLOW IS PRIMARILY FROM GROUND-WATER STORAGE. THESE MEASUREMENTS, WHEN CORRELATED WITH THE SIMULTANEOUS DISCHARGE OF A NEARBY STREAM WHERE CONTINUOUS RECORDS ARE AVAILABLE, WILL GIVE A PICTURE OF THE LOW-FLOW POTENTIALITY OF THE STREAM. THE COLUMN HEADED "PERIOD OF RECORD" SHOWS THE WATER YEARS IN WHICH MEASUREMENTS WERE MADE AT THE SAME, OR PRACTICALLY THE SAME, SITE. MEASUREMENTS HAVE BEEN MADE AT NUMEROUS OTHER STATIONS THROUGHOUT THE STATE SINCE 1961. THESE MEASUREMENTS ARE PUBLISHED IN PRECEDING WATER RESOURCES DATA FOR WISCONSIN PUBLICATIONS.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1976

STATION	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	MEASUREMENTS	
					DATE	DISCHARGE (FT ³ /S)
STREAMS TRIBUTARY TO LAKE SUPERIOR						
04024350	BLACK RIVER NEAR PATZAU, WIS.	LAT 46°26'45", LONG 92°10'05", IN S 1/2 SEC.19, T.46 N., R.14 W., DOUGLAS COUNTY, AT BRIDGE ON STATE HIGHWAY 35, 4.0 MI (6.4 KM) SOUTHEAST OF PATZAU.	53.6	1964 1967 1969-76	08-03-76	.51
04025000	AMNICON RIVER NEAR POPLAR, WIS.	LAT 46°36'20", LONG 91°53'20", ON COMMON BOUNDARY OF SECS.29 AND 32, T.48 N., R.12 W., DOUGLAS COUNTY, AT BRIDGE ON U.S. HIGHWAY 2, 4.5 MI (7.2 KM) NORTHWEST OF POPLAR.	112	1964 1967 1969-76	08-03-76	2.60
04025100	MIDDLE RIVER NEAR POPLAR, WIS.	LAT 46°39'05", LONG 91°48'15", IN SE 1/4 SEC.12, T.48 N., R.12 W., DOUGLAS COUNTY, AT BRIDGE ON STATE HIGHWAY 13, 4.6 MI (7.4 KM) NORTH OF POPLAR.	51.6	1964 1967 1969-76	08-03-76	.36
04026030	REEFER CREEK NEAR PORT WING, WIS.	LAT 46°44'54", LONG 91°30'32", IN NW 1/4 SEC.4, T.49 N., R.9 W., BAYFIELD COUNTY, AT BRIDGE ON STATE HIGHWAY 13, 5.8 MI (9.3 KM) SOUTHEAST OF PORT WING.	10.9	1964 1967 1969-76	08-03-76	2.54
04026120	FLAG RIVER AT PORT WING, WIS.	LAT 46°46'55", LONG 91°22'25", IN CENTER OF SEC.28, T.50 N., R.8 W., BAYFIELD COUNTY, AT BRIDGE ON STATE HIGHWAY 13, JUST NORTHEAST OF PORT WING.	33.9	1964 1967 1969-76	08-03-76	29.5
04026190	SAND RIVER NEAR RED CLIFF, WIS.	LAT 46°54'00", LONG 90°57'20", IN NE 1/4 SEC.14, T.51 N., R.5 W., BAYFIELD COUNTY, AT BRIDGE ON STATE HIGHWAY 13, 8.5 MI (13.7 KM) NORTHWEST OF RED CLIFF.	28.2	1964 1967 1969-76	08-03-76	3.99
04026350	NORTH FISH CREEK NEAR ASHLAND, WIS.	LAT 46°34'45", LONG 90°57'55", IN SW 1/4 SEC.2, T.47 N., R.5 W., BAYFIELD COUNTY, AT BRIDGE ON U.S. HIGHWAY 2, 3.0 MI (4.8 KM) WEST OF ASHLAND.	88.1	1967 1969-76	08-04-76	84.2
*04026400	SPILLERBERG CREEK NEAR CAYUGA, WIS.	LAT 46°11'48", LONG 90°37'32", IN NW 1/4 SEC.21, T.43 N., R.2 W., ASHLAND COUNTY, AT CONCRETE CULVERT PIPE ON STATE HIGHWAY 13, 4.2 MI (6.8 KM) SOUTHEAST OF CAYUGA.	6.18	1961-67 1969-72 1974 1976	06-26-74 08-04-76	1.75 0.00
04026550	TYLER FORKS RIVER NEAR UPSON, WIS.	LAT 46°20'50", LONG 90°29'40", IN SE 1/4 SEC.28, T.45 N., R.1 W., IRON COUNTY, AT CULVERT ON STATE HIGHWAY 77, 4.3 MI (6.9 KM) SOUTHWEST OF UPSON.	41.3	1967 1969-76	08-04-76	1.68
04026600	MARENGO RIVER NEAR MARENGO, WIS.	LAT 46°25'45", LONG 90°49'05", IN NW 1/4 SEC.36, T.46 N., R.4 W., ASHLAND COUNTY, AT BRIDGE ON STATE HIGHWAY 13, 0.2 MI (0.3 KM) NORTH OF MARENGO.	A 101	1967 1969-76	08-04-76	31.3
04026650	TROUT BROOK NEAR HIGHBRIDGE, WIS.	LAT 46°23'40", LONG 90°46'25", IN SW 1/4 SEC.8, T.45 N., R.3 W., ASHLAND COUNTY, AT CULVERT ON STATE HIGHWAY 13, 1.9 MI (3.1 KM) WEST OF HIGHBRIDGE.	8.60	1967 1969-76	08-04-76	.38

* ALSO A CREST-STAGE GAGE.
A APPROXIMATELY.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1976

STATION	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	MEASUREMENTS	
					DATE	DISCHARGE (FT ³ /S)
STREAMS TRIBUTARY TO LAKE SUPERIOR--CONTINUED						
04027200	PEARL CREEK AT GRAND VIEW, WIS.	LAT 46°22'05", LONG 91°05'27", IN SE 1/4 NE 1/4 SEC.22, T.45 N., R.6 W., BAYFIELD COUNTY, AT BRIDGE ON U.S. HIGHWAY 63, 0.0 MI (1.3 KM) EAST OF GRAND VIEW.	16.9	1961-70 1972 1976	08-04-76	5.53
04027900	LAYMAN CREEK NEAR HURLEY, WIS.	LAT 46°19'35", LONG 90°09'20", IN NE 1/4 SEC.6, T.44 N., R.3 E., IRON COUNTY, AT BRIDGE ON U.S. HIGHWAY 51, 8.0 MI (12.9 KM) SOUTHEAST OF MONTREAL.	A 17.8	1967 1969-76	08-04-76	.32
STREAMS TRIBUTARY TO LAKE MICHIGAN						
04059800	BRULE CREEK AT ALVIN, WIS.	LAT 45°59'36", LONG 86°51'44", IN NW 1/4 SEC.34, T.41 N., R.13 E., FOREST COUNTY, AT BRIDGE ON U.S. FOREST SERVICE ROAD 2458, 1.6 MI (2.6 KM) NORTHWEST OF ALVIN.	37.0	1969-76	07-08-75 09-01-76	20.2 17.2
04060990	MONTAGNE CREEK NEAR FLORENCE, WIS.	LAT 45°57'13", LONG 88°20'25", IN SE 1/4 SW 1/4 SEC.11, T.40 N., R.17 E., FLORENCE COUNTY, ON TOWN ROAD, 4.8 MI (7.7 KM) NORTHWEST OF FLORENCE.	14.4	1969-70 1972-76	08-31-76	4.96
04063600	PINE RIVER NEAR THREE LAKES, WIS.	LAT 45°49'55", LONG 88°55'00", NW 1/4 SEC.30, T.39 N., R.13 E., FOREST COUNTY, AT BRIDGE ON U.S. FOREST SERVICE ROAD 2182, 12.4 MI (20.0 KM) NORTHEAST OF THREE LAKES.	16.2	1966 1969-76	09-01-76	0.00
04063690	SOUTH BRANCH POPPLE RIVER NEAR FENCE, WIS.	LAT 45°44'40", LONG 88°33'35", IN SW 1/4 NE 1/4 SEC.25, T.38 N., R.15 E., FLORENCE COUNTY, ON U.S. FOREST SERVICE ROAD 2159, 6.5 MI (10.4 KM) WEST OF FENCE.	10.2	1969 1972-76	09-01-76	5.00
04065970	SOUTH BRANCH PEMBONWON RIVER NEAR PEMBINE, WIS.	LAT 45°39'23", LONG 88°02'25", IN SE 1/4 SEC.19, T.37 N., R.20 E., MARINETTE COUNTY, ON COUNTY TRUNK HIGHWAY 0, 2.8 MI (4.5 KM) NORTHWEST OF PEMBINE.	26.6	1969-70 1972-76	08-31-76	3.20
04066250	SOUTH BRANCH PIKE RIVER NEAR DUNBAR, WIS.	LAT 45°32'59", LONG 88°11'03", IN NE 1/4 SEC.36, T.36 N., R.15 E., MARINETTE COUNTY, ON TOWN ROAD, 6.9 MI (11.1 KM) SOUTH OF DUNBAR.	72.4	1969-70 1972-76	06-27-74 08-31-76	38.6 18.3
04067700	NORTH BRANCH PESHTIGO RIVER NEAR ARGONNE, WIS.	LAT 45°40'22", LONG 88°49'07", IN NW 1/4 SW 1/4 SEC.24, T.37 N., R.13 E., FOREST COUNTY, ON U.S. FOREST SERVICE ROAD 2387, 2.9 MI (4.7 KM) NORTHEAST OF ARGONNE.	32.4	1969 1972-76	09-01-76	8.00
04067750	CAMP EIGHT CREEK NEAR CAVOUR, WIS.	LAT 45°39'06", LONG 88°40'52", IN NE 1/4 NE 1/4 SEC.36, T.37 N., R.14 E., FOREST COUNTY, ON COUNTY TRUNK HIGHWAY 6, 2.3 MI (3.7 KM) WEST OF CAVOUR.	15.0	1969 1972-76	09-01-76	3.20
*04067800	ARMSTRONG CREEK NEAR ARMSTRONG CREEK, WIS.	LAT 45°39'29", LONG 88°28'44", IN W 1/2 SEC.27, T.37 N., R.16 E., FOREST COUNTY, AT BRIDGE ON U.S. HIGHWAY 8, 1.8 MI (2.9 KM) NORTHWEST OF ARMSTRONG CREEK.	23.1	1963-67 1969 1976	08-31-76	3.42
04067900	RAT RIVER NEAR WABENO, WIS.	LAT 45°29'00", LONG 88°29'52", IN SE 1/4 SEC.28, T.35 N., R.16 E., FOREST COUNTY, AT BRIDGE ON U.S. FOREST SERVICE ROAD 2134, 8.0 MI (12.9 KM) NORTHEAST OF WABENO.	82.6	1969-70 1972-76	09-01-76	58.1
04067990	EAGLE CREEK NEAR ATHELSTONE, WIS.	LAT 45°24'04", LONG 88°11'10", ON COMMON BOUNDARY OF SECS.24 AND 25, T.34 N., R.18 E., MARINETTE COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY C, 4.5 MI (7.2 KM) SOUTHWEST OF ATHELSTONE.	38.6	1969-70 1972-76	09-02-76	12.4
04068100	NORTH FORK THUNDER RIVER NEAR LAKEWOOD, WIS.	LAT 45°19'31", LONG 88°19'40", IN NE 1/4 SEC.23, T.33 N., R.17 E., OCONTO COUNTY, AT CULVERT ON U.S. FOREST SERVICE ROAD 2101, 9.7 MI (15.6 KM) NORTHEAST OF LAKEWOOD.	20.0	1969-70 1972-76	09-02-76	9.80

* ALSO A CREST-STAGE GAGE.
A APPROXIMATELY.

DISCHARGE MEASUREMENTS MADE AT LOW-FLDW PARTIAL-RECORD STATIONS DURING WATER YEAR 1976

STATION	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	MEASUREMENTS			
				PERIOD OF RECORD	DATE	DISCHARGE (FT ³ /S)	
STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED							
04069290	MIDDLE INLET NEAR MIDDLE INLET, WIS.	LAT 45°17'38", LONG 87°56'16", ON COMMON BOUNDARY OF SECS.30 AND 31, T.33 N., R.21 E., MARINETTE COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY X, 2.7 MI (4.3 KM) EAST OF MIDDLE INLET.	56.9	1968-70 1973-76	09-02-76	24.4	
04069350	SOUTH BRANCH BEAVER CREEK NEAR BEAVER, WIS.	LAT 45°07'50", LONG 88°01'02", IN SW 1/4 NE 1/4 SEC.28, T.31 N., R.20 E., MARINETTE COUNTY, ON U.S. HIGHWAY 141, 0.5 MI (0.8 KM) SOUTH OF BEAVER.	53.9	1969 1972-76	09-03-76	19.3	
04069390	LITTLE PESHTIGO RIVER NEAR COLEMAN, WIS.	LAT 45°03'54", LONG 87°59'44", IN SE 1/4 SW 1/4 SEC.18, T.30 N., R.21 E., MARINETTE COUNTY, ON COUNTY TRUNK HIGHWAY B, 1.9 MI (3.0 KM) EAST OF COLEMAN.	49.9	1969 1972-76	09-03-76	2.64	
04069480	TROUT CREEK NEAR PESHTIGO, WIS.	LAT 45°03'35", LONG 87°46'44", ON COMMON BOUNDARY OF SECS.23 AND 24, T.30 N., R.22 E., MARINETTE COUNTY, AT BRIDGE, 1.5 MI (2.4 KM) WEST OF PESHTIGO.	24.3	1969-76	09-03-76	0.00	
04070100	NORTH BRANCH OCONTO RIVER NEAR MOUNTAIN, WIS.	LAT 45°13'57", LONG 88°28'30", IN SW 1/4 SW 1/4 SEC.23, T.32 N., R.16 E., OCONTO COUNTY, ON U.S. FOREST SERVICE ROAD 2106, 3.3 MI (5.3 KM) NORTH OF MOUNTAIN.	178	1969-70 1972-76	09-02-76	86.3	
04070300	WAUPEE CREEK NEAR MOUNTAIN, WIS.	LAT 45°07'52", LONG 88°26'31", IN SW 1/4 SEC.30, T.31 N., R.17 E., OCONTO COUNTY, AT BRIDGE ON STATE HIGHWAY 32 AND 64, 4.2 MI (6.8 KM) SOUTHEAST OF MOUNTAIN.	47.9	1969-70 1972-76	09-02-76	14.3	
04070600	HILLS POND CREEK NEAR LANGLADE, WIS.	LAT 45°11'50", LONG 88°37'15", IN SE 1/4 SEC.4, T.31 N., R.15 E., LANGLADE COUNTY, AT BRIDGE ON STATE HIGHWAY 64, 5.5 MI (8.8 KM) EAST OF LANGLADE.	9.15	1969-70 1972-76	09-02-76	10.8	
04070800	PECORE CREEK NEAR HAYES, WIS.	LAT 45°00'28", LONG 88°26'55", IN NE 1/4 SEC.8, T.29 N., R.17 E., OCONTO COUNTY, AT CULVERT ON COUNTRY ROAD, 1.2 MI (1.9 KM) NORTHWEST OF HAYES.	30.4	1969-70 1972-76	07-08-76	12.6	
04071730	KELLY BROOK NEAR LENA, WIS.	LAT 44°58'22", LONG 88°02'45", IN SE 1/4 NW 1/4 SEC.22, T.29 N., R.20 E., OCONTO COUNTY, ON U.S. HIGHWAY 141, 1.5 MI (2.4 KM) NORTH OF LENA.	79.6	1969 1972-76	09-03-76	7.16	
*04071800	PENSAUKEE RIVER NEAR PULASKI, WIS.	LAT 44°45'48", LONG 88°15'07", IN NE 1/4 SEC.1, T.26 N., R.18 E., SHAWANO COUNTY, AT BRIDGE ON STATE HIGHWAY 32, 6.1 MI (9.8 KM) NORTH OF PULASKI.	43.2	1961 1963-67 1969 1972-74 1976	10-23-75 07-14-76	3.56 .30	
04072000	SUAMICO RIVER AT SUAMICO, WIS.	LAT 44°37'55", LONG 88°04'00", IN NW 1/4 SEC.22, T.25 N., R.20 E., BROWN COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY B, 3.0 MI (5.0 KM) UPSTREAM FROM MOUTH, 7.5 MI (12.1 KM) NORTH OF GREEN BAY, 0.5 MI (0.8 KM) WEST OF SUAMICO.	57.0	1969 1972-74 1976	10-24-75 07-08-76	5.94 2.55	
04072050	DUCK CREEK NEAR ONEIDA, WIS.	LAT 44°27'58", LONG 88°13'08", IN SE 1/4 SEC.17, T.23 N., R.19 E., BROWN COUNTY, AT BRIDGE ON COUNTRY ROAD, 2.9 MI (4.7 KM) SOUTHWEST OF ONEIDA.	92.2	1968-70 1972-74 1976	10-24-75 10-30-75	.85 .92	
04072700	NEENAH CREEK NEAR BRIGGSVILLE, WIS.	LAT 43°40'08", LONG 89°33'24", IN NW 1/4 SEC.28, T.14 N., R.8 E., MARINETTE COUNTY, AT BRIDGE ON STATE HIGHWAY 23, 1.8 MI (2.9 KM) NORTHEAST OF BRIGGSVILLE.	75.0	1962-67 1976	06-22-76 09-16-76	44.6 50.4	
04073300	CHAFFEE CREEK NEAR NESHKORO, WIS.	LAT 43°57'02", LONG 89°20'49", IN NE 1/4 SEC.18, T.17 N., R.10 E., MARQUETTE COUNTY, AT BRIDGE ON COUNTRY ROAD, 6.5 MI (10.5 KM) WEST OF NESHKORO.	R 45.4	1962-64 1966-67 1970-71 1976	06-22-76 07-14-76 09-15-76	37.2 32.6 30.2	

* ALSO A CREST-STAGE GAGE.
R REVISED.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1976

STATION	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	MEASUREMENTS	
					DATE	DISCHARGE (FT ³ /S)
STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED						
*04073400	BIRD CREEK NEAR WAUTOMA, WIS.	LAT 44°06'00", LONG 89°18'00", IN S 1/2 SEC.34, T.19 N., R.10 E., WAUSHARA COUNTY, AT CONCRETE CULVERT ON STATE HIGHWAY 21, 0.2 MI (0.3 KM) WEST OF WAUTOMA.	R 3.59	1961-67 1976	06-22-76 09-15-76	9.09 8.07
04073420	LUNCH CREEK NEAR NESHKORO, WIS.	LAT 43°57'35", LONG 89°16'30", IN NE 1/4 SEC.11, T.17 N., R.10 E., MARQUETTE COUNTY, AT BRIDGE ON COUNTY ROAD, 2.8 MI (4.5 KM) WEST OF NESHKORO.	R 18.3	1962-64 1966-67 1976	06-22-76 09-15-76	11.7 7.12
04073450	SUCKER CREEK NEAR BERLIN, WIS.	LAT 43°56'30", LONG 89°04'47", IN SW 1/4 SEC.16, T.17 N., R.12 E., GREEN LAKE COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY D, 6.6 MI (10.6 KM) WEST OF BERLIN.	20.1	1962-64 1966-67 1976	06-23-76 09-15-76	6.18 4.24
04073900	EIGHTMILE CREEK AT FISK, WIS.	LAT 43°57'20", LONG 88°40'44", IN SW 1/4 SEC.11, T.17 N., R.15 E., WINNEBAGO COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY FF, AT FISK.	22.8	1969-70 1973-74 1976	10-29-75 09-13-76	0.00 0.00
*04074700	HUNTING RIVER NEAR ELCHO, WIS.	LAT 45°25'10", LONG 89°11'15", IN N 1/2 SEC.24, T.34 N., R.10 E., LANGLADE COUNTY, AT TWIN CULVERTS ON U.S. HIGHWAY 45 AND STATE HIGHWAY 47, 1.5 MI (2.4 KM) SOUTH OF ELCHO.	R 9.00	1963-64 1966-67 1976	09-14-76	7.96
*04074850	LILY RIVER NEAR LILY, WIS.	LAT 45°20'59", LONG 88°49'52", IN SE 1/4 SEC.11, T.33 N., R.13 E., LANGLADE COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY T, 3.2 MI (5.1 KM) NORTH OF LILY.	R 52.4	1963-64 1966-67 1976	09-01-76	25.0
04076400	LITTLE WEST BRANCH NEAR NEOPIT, WIS.	LAT 45°00'54", LONG 88°46'11", IN NW 1/4 SEC.11, T.29 N., R.14 E., MENOMINEE COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY M, 3.8 MI (6.1 KM) NORTHEAST OF NEOPIT.	21.1	1969-70 1972-76	07-08-76	6.68
04078050	SHIOC RIVER AT NICHOLS, WIS.	LAT 44°33'54", LONG 88°28'58", IN SW 1/4 SEC.7, T.24 N., R.17 E., OUTAGAMIE COUNTY, AT BRIDGE ON STATE HIGHWAY 156, 0.8 MI (1.3 KM) WEST OF NICHOLS.	92.0	1968-70 1972-76	07-06-76	2.16
04078080	BEAR CREEK AT STEPHENSVILLE, WIS.	LAT 44°22'15", LONG 88°35'05", IN NE 1/4 SEC.20, T.22 N., R.16 E., OUTAGAMIE COUNTY, AT BRIDGE ON STATE HIGHWAY 76, AT STEPHENSVILLE.	59.4	1969-76	07-08-76	.81
04078490	HILL CREEK NEAR PELLA, WIS.	LAT 44°44'41", LONG 88°44'49", IN NW 1/4 SEC.12, T.26 N., R.14 E., SHAWANO COUNTY, AT BRIDGE ON COUNTRY ROAD, 2.8 MI (4.5 KM) EAST OF PELLA.	23.1	1969-70 1972-76	07-07-76	7.55
04078600	NORTH BRANCH PIGEON RIVER NEAR MARION, WIS.	LAT 44°40'21", LONG 88°56'46", IN NE 1/4 SEC.5, T.25 N., R.13 E., WAUPACA COUNTY, AT FARM BRIDGE, 2.8 MI (4.5 KM) WEST OF MARION.	10.8	1969-74 1976	07-07-76	2.34
04078800	BEAR CREEK NEAR SUGAR BUSH, WIS.	LAT 44°29'34", LONG 88°42'08", IN SE 1/4 SEC.5, T.23 N., R.15 E., OUTAGAMIE COUNTY, AT BRIDGE ON COUNTRY ROAD, 1.9 MI (3.0 KM) NORTHEAST OF SUGAR BUSH.	26.3	1969-70 1972-76	07-07-76	.10
04079900	PETERSON CREEK NEAR SCANDINAVIA, WIS.	LAT 44°26'03", LONG 89°09'48", IN SE 1/4 SEC.28, T.23 N., R.11 E., WAUPACA COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY Q, 2.1 MI (3.4 KM) SOUTHWEST OF SCANDINAVIA.	21.2	1962-64 1966-67 1976	07-07-76	14.8
04080800	TOMORROW RIVER NEAR NELSONVILLE, WIS.	LAT 44°30'51", LONG 89°20'02", IN NW 1/4 SEC.31, T.24 N., R.10 E., PORTAGE COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY Q, 1.8 MI (2.9 KM) NORTHWEST OF NELSONVILLE.	A 43.0	1962-64 1966-67 1976	07-06-76	22.6

* ALSO A CREST-STAGE GAGE.
A APPROXIMATELY.
R REVISED.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1976

STATION	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	MEASUREMENTS	
					DATE	DISCHARGE (FT ³ /S)
STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED						
*04081000	WAUPACA RIVER NEAR WAUPACA, WIS.	LAT 44°19'50", LONG 88°59'45", ON NORTH LINE OF SEC.1, T.21 N., R.12 E., WAUPACA COUNTY, ON RIGHT BANK, 10 FT (3 M) DOWNSTREAM FROM BRIDGE ON U.S. HIGHWAY 10, 4.0 MI (6.4 KM) UPSTREAM FROM WEYAUWEGA LAKE DAM, 4.5 MI (7.2 KM) SOUTHEAST OF WAUPACA.	272	1916-63 B 1964-66 C 1967-70 1972-76	07-07-76	151
04081100	WALLA WALLA CREEK NEAR WEYAUWEGA, WIS.	LAT 44°17'20", LONG 88°55'53", IN SW 1/4 SEC.16, T.21 N., R.13 E., WAUPACA COUNTY, AT BRIDGE ON U.S. HIGHWAY 10, 2.2 MI (3.5 KM) SOUTH OF WEYAUWEGA.	R 52.0	1963-64 1966-67 1976	07-08-76	13.8
04081450	WILLOW CREEK NEAR REOGRANITE, WIS.	LAT 44°03'19", LONG 89°08'32", IN NW 1/4 SEC.12, T.18 N., R.11 E., WAUSHARA COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY 5, 2.1 MI (3.4 KM) NORTHWEST OF REOGRANITE.	33.6	1962-67 1976	07-09-76	37.7
04081800	DAGGETTS CREEK NEAR BUTTE DES MORTS, WIS.	LAT 44°05'48", LONG 88°37'16", IN SW 1/4 SEC.20, T.19 N., R.16 E., WINNEBAGO COUNTY, AT BRIDGE ON COUNTRY ROAD, 1.5 MI (2.4 KM) EAST OF BUTTE DES MORTS.	10.3	1969-70 1974 1976	10-29-75 09-13-76	0.00 0.00
*04085030	APPLE CREEK NEAR KAUKAUNA, WIS.	LAT 44°19'15", LONG 88°17'33", ON WEST BOUNDARY SEC.2, T.21 N., R.18 E., OUTAGAMIE COUNTY, AT BRIDGE ON STATE HIGHWAY 55, 3.5 MI (5.6 KM) NORTH OF KAUKAUNA.	15.0	1963-67 1969-70 1972-73 1976	07-25-72 10-12-72 06-02-73 10-30-75	0.00 0.00 0.00 0.00
04085070	ASHWAUBENON CREEK NEAR DE PERE, WIS.	LAT 44°27'17", LONG 88°05'42", ON COMMON BOUNDARY OF LAND GRANTS 28 AND 29, T.23 N., R.20 E., BROWN COUNTY, AT CULVERTS ON COUNTY TRUNK HIGHWAY 6, 0.5 MI (0.8 KM) WEST OF DE PERE.	25.2	1969-70 1972-74 1976	10-30-75 07-14-76	.26 E 4.01
04085110	EAST RIVER NEAR DE PERE, WIS.	LAT 44°24'22", LONG 88°03'10", IN SE 1/4 SEC.3, T.22 N., R.20 E., BROWN COUNTY, AT BRIDGE ON STATE HIGHWAY 32, 2.5 MI (4.0 KM) SOUTH OF DE PERE.	58.4	1969-70 1972-74 1976	10-30-75 07-08-76	2.00 .51
04085170	HIBBARO CREEK AT JACKSONPORT, WIS.	LAT 44°59'16", LONG 87°10'31", IN SE 1/4 SEC.14, T.29 N., R.27 E., DOOR COUNTY, AT CULVERT ON STATE HIGHWAY 57, 0.8 MI (1.3 KM) NORTHEAST OF JACKSONPORT.	22.5	1969-70 1972-74 1976	10-23-75 07-12-76 09-16-76	2.39 2.24 .46
04085160	STONEY CREEK NEAR ALGOMA, WIS.	LAT 44°40'24", LONG 87°22'37", IN NW 1/4 SEC.5, T.25 N., R.26 E., DOOR COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY U, 5.5 MI (8.8 KM) NORTHEAST OF ALGOMA.	24.8	1969-70 1972-74 1976	10-23-75 07-13-76 09-16-76	4.49 .07 .14
04085190	SILVER CREEK NEAR ALGOMA, WIS.	LAT 44°37'49", LONG 87°30'03", IN NE 1/4 SEC.19, T.25 N., R.25 E., KEWAUNEE COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY O, 3.5 MI (5.6 KM) NORTHWEST OF ALGOMA.	58.0	1969-70 1972-74 1976	10-22-75 07-13-76 09-15-76	4.77 0.00 0.00
04065280	EAST TWIN RIVER AT MISHICOT, WIS.	LAT 44°14'13", LONG 87°38'19", IN NW 1/4 SEC.4, T.20 N., R.24 E., MANITOWOC COUNTY, AT BRIDGE ON STATE HIGHWAY 147, AT MISHICOT.	109	1969-70 1972-74 1976	10-21-75 07-13-76	16.1 9.18
04085330	WEST TWIN RIVER NEAR FRANCIS CREEK, WIS.	LAT 44°12'54", LONG 87°40'50", IN SW 1/4 SEC.7, T.20 N., R.24 E., MANITOWOC COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY O, 2.3 MI (3.7 KM) NORTHEAST OF FRANCIS CREEK.	146	1969-70 1972-74 1976	10-21-75 07-13-76 09-14-76	19.1 9.16 12.9
04085410	MUD CREEK NEAR REOSVILLE, WIS.	LAT 44°08'21", LONG 87°57'26", IN SW 1/4 SEC.2, T.19 N., R.21 E., MANITOWOC COUNTY, AT BRIDGE ON COUNTRY ROAD, 1.0 MI (1.6 KM) SOUTH OF REOSVILLE.	38.7	1969-70 1972-76	09-30-76	.48
04085420	BRANCH RIVER NEAR CATO, WIS.	LAT 44°11'20", LONG 87°51'04", IN SE 1/4 SEC.22, T.20 N., R.22 E., MANITOWOC COUNTY, AT BRIDGE ON COUNTRY ROAD, 3.3 MI (5.3 KM) NORTH OF CATO.	80.7	1969-70 1972-76	09-30-76	3.49

* ALSO A CREST-STAGE GAGE.

B OPERATED AS A SEASONAL CONTINUOUS-RECORD GAGING STATION.

C OPERATED AS A SEASONAL CONTINUOUS-RECORD GAGING STATION WITHOUT RECORDS BEING PUBLISHED.

E ESTIMATED.

R REVISED.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1976

STATION	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	MEASUREMENTS	
					DATE	DISCHARGE (FT ³ /S)
STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED						
04085460	PIGEON RIVER NEAR MILLERSVILLE, WIS.	LAT 43°47'49", LONG 87°48'02", IN SW 1/4 SEC.6, T.15 N., R.23 E., SHEBOYGAN COUNTY, AT BRIDGE ON COUNTRY ROAD, 2.1 MI (3.4 KM) SOUTHEAST OF MILLERSVILLE.	66.1	1969-70 1972-76	08-12-76 09-29-76	3.32 2.58
04085480	SHEBOYGAN RIVER NEAR FOND DU LAC, WIS.	LAT 43°48'33", LONG 88°15'04", IN SW 1/4 SEC.32, T.16 N., R.19 E., FOND DU LAC COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY W, 10.2 MI (16.4 KM) EAST OF FOND DU LAC.	27.9	1962-67 1976	08-11-76	1.26
04085800	ONION RIVER NEAR WALDO, WIS.	LAT 43°41'39", LONG 87°57'37", ON COMMON BOUNDARY OF SECS.10 AND 11, T.14 N., R.21 E., SHEBOYGAN COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY AC, 1.4 MI (2.2 KM) NORTHWEST OF WALDO.	18.2	1969-70 1972-76	08-10-76 09-29-76	9.29 9.17
04086020	SAUK CREEK NEAR PORT WASHINGTON, WIS.	LAT 43°24'45", LONG 87°52'49", IN SW 1/4 SEC.16, T.11 N., R.22 E., OZAUKEE COUNTY, AT BRIDGE ON COUNTRY ROAD, 1.8 MI (2.9 KM) NORTH OF PORT WASHINGTON.	30.2	1962-67 1976	08-09-76	0.00
04086300	NORTH BRANCH MILWAUKEE RIVER NEAR CASCADE, WIS.	LAT 43°36'03", LONG 88°00'43", IN SW 1/4 SEC.8, T.13 N., R.21 E., SHEBOYGAN COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY A, 4.1 MI (6.6 KM) SOUTH OF CASCADE.	R 43.2	1962-67 1969 1976	09-29-76	10.7
04087050	LITTLE MEMOMONEE RIVER NEAR FREISTADT, WIS.	LAT 43°12'24", LONG 88°02'24", ON COMMON BOUNDARY OF SECS.29 AND 32, T.9 N., R.21 E., OZAUKEE COUNTY, AT BRIDGE ON DONGES BAY ROAD, 2.0 MI (3.2 KM) SOUTH OF FREISTADT.	7.96	1961-67 1973 1976	09-28-76	.13
04087150	KINNICKINNIC RIVER AT MILWAUKEE, WIS.	LAT 42°59'30", LONG 87°56'54", IN SE 1/4 SEC.12, T.6 N., R.21 E., MILWAUKEE COUNTY, AT BRIDGE ON S. 27TH STREET, AT MILWAUKEE.	17.6	1962-67 1976	09-27-76	8.11
ST. CROIX RIVER BASIN						
05331590	LOWER OX CREEK NEAR GORDON, WIS.	LAT 45°17'40", LONG 91°44'17", IN NE 1/4 SE 1/4 SEC.16, T.44 N., R.11 W., DOUGLAS COUNTY, ON TOWN ROAD, 4.6 MI (7.4 KM) NORTHEAST OF GORDON.	99.4	1969-76	06-08-76 08-04-76 09-29-76	15.4 13.4 14.4
05331900	CHIPPANAZIE CREEK AT STANBERRY, WIS.	LAT 45°59'50", LONG 91°38'05", IN NW 1/4 SEC.33, T.41 N., R.10 W., WASHBURN COUNTY, AT CULVERT ON U.S. HIGHWAY 63, 0.8 MI (1.3 KM) SOUTHWEST OF STANBERRY.	A 33.8	1964 1967 1969-76	06-08-76 08-05-76 09-29-76	4.62 5.74 2.83
05331950	BEAN BROOK NEAR SPRING BROOK, WIS.	LAT 45°54'00", LONG 91°39'40", IN NE 1/4 SEC.1, T.39 N., R.11 W., WASHBURN COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY M, 3.5 MI (5.6 KM) SOUTHEAST OF SPRING BROOK.	A 38.1	1964 1967 1969-76	06-08-76 08-05-76 09-29-76	28.9 24.0 20.7
05332100	POTATO CREEK AT TREGO, WIS.	LAT 45°53'32", LONG 91°49'39", IN SW 1/4 SEC.2, T.39 N., R.12 W., WASHBURN COUNTY, AT CULVERT ON U.S. HIGHWAYS 53 AND 63, 0.9 MI (1.4 KM) SOUTH OF TREGO.	25.7	1962-64 1966-67 1969 1976	06-09-76 08-04-76 09-29-76	15.3 14.0 12.2
05332700	STUNTZ BROOK NEAR MINONG, WIS.	LAT 46°00'45", LONG 91°57'25", IN SW 1/4 SEC.23, T.41 N., R.13 W., WASHBURN COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY F, 8.8 MI (14.2 KM) SOUTHWEST OF MINONG.	18.2	1964 1967 1969-76	06-09-76 08-04-76 09-29-76	1.35 .82 .71
05333080	FROG CREEK NEAR MINONG, WIS.	LAT 46°06'45", LONG 91°46'35", IN NW 1/4 SEC.20, T.42 N., R.11 W., WASHBURN COUNTY, AT BRIDGE ON COUNTRY ROAD, 2.4 MI (3.9 KM) NORTHEAST OF MINONG.	A 31.7	1964 1967 1969-76	06-08-76 08-04-76 09-29-76	3.23 2.23 1.19
*05333100	LITTLE FROG CREEK NEAR MINONG, WIS.	LAT 46°05'48", LONG 91°46'39", IN NW 1/4 SEC.29, T.42 N., R.11 W., WASHBURN COUNTY, AT CULVERT ON COUNTRY ROAD, 2.5 MI (4.0 KM) EAST OF MINONG.	13.6	1961 1963-76	06-08-76	.65

* ALSO A CREST-STAGE GAGE.
A APPROXIMATELY,
R REVISED.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1976

STATION	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	MEASUREMENTS	
					DATE	DISCHARGE (FT ³ /S)
ST. CROIX RIVER BASIN--CONTINUED						
05333510	CHASES BROOK NEAR DANBURY, WIS.	LAT 46°04'40", LONG 92°15'50", IN NE 1/4 SEC.32, T.42 N., R.15 W., BURNETT COUNTY, AT BRIDGE ON COUNTRY ROAD, 7.0 MI (11.3 KM) NORTHEAST OF DANBURY.	A 38.0	1964 1967 1969-76	06-09-76 08-05-76 09-29-76	3.62 1.86 1.53
05334500	YELLOW RIVER AT WEBSTER, WIS.	LAT 45°53'35", LONG 92°21'55", DN COMMON BOUNDARY OF SECS.4 AND 5, T.39 N., R.16 W., BURNETT COUNTY, AT BRIDGE ON STATE HIGHWAY 35, 1.3 MI (2.1 KM) NORTH OF WEBSTER.	228	1914# 1964 1967 1969-76	06-09-76 09-29-76	117 143
05335300	CLAM RIVER NEAR FREDERIC, WIS.	LAT 45°38'23", LONG 92°15'29", IN NW 1/4 SEC.6, T.36 N., R.15 W., POLK COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY W, 9.9 MI (15.9 KM) EAST OF FREDERIC.	38.4	1962-64 1966-67 1969 1976	06-10-76 08-05-76 09-28-76	1.32 .69 .46
05338900	WOOD RIVER NEAR SIREN, WIS.	LAT 45°45'00", LONG 92°28'10", ON COMMON BOUNDARY OF SECS.27 AND 28, T.38 N., R.17 W., BURNETT COUNTY, AT BRIDGE ON COUNTRY ROAD, 4.8 MI (7.7 KM) SOUTHWEST OF SIREN.	26.8	1964 1967 1969-76	08-05-76 09-28-76	.23 .10
05338950	NORTH FORK WOOD RIVER NEAR GRANTSBURG, WIS.	LAT 45°47'30", LONG 92°37'00", IN E 1/2 SEC.8, T.38 N., R.18 W., BURNETT COUNTY, AT BRIDGE ON COUNTRY ROAD, 3.5 MI (5.6 KM) NORTHEAST OF GRANTSBURG.	67.3	1964 1967 1969-76	06-09-76 08-05-76 09-29-76	6.13 4.13 1.96
*05340300	TRADE RIVER NEAR FREDERIC, WIS.	LAT 45°37'41", LONG 92°29'19", IN SW 1/4 SEC.4, T.36 N., R.17 W., POLK COUNTY, AT BOX CULVERT ON STATE HIGHWAYS 35 AND 48, 2.5 MI (4.0 KM) SOUTHWEST OF FREDERIC.	6.34	1961-67 1969 1976	06-10-76 08-05-76 09-28-76	3.34 1.71 1.44
05340400	WOLF CREEK NEAR ST. CROIX FALLS, WIS.	LAT 45°33'20", LONG 92°43'05", IN SE 1/4 SEC.33, T.36 N., R.19 W., POLK COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY G, 11.0 MI (17.7 KM) NORTHWEST OF ST. CROIX FALLS.	29.3	1964 1967 1969-76	06-09-76 08-03-76 09-28-76	5.76 4.35 5.44
05341690	WILLOW RIVER NEAR NEW RICHMOND, WIS.	LAT 45°08'13", LONG 92°24'40", IN SE 1/4 SEC.25, T.31 N., R.17 W., ST. CROIX COUNTY, AT BRIDGE ON STATE HIGHWAY 64, 6.2 MI (10.0 KM) EAST OF NEW RICHMOND.	85.1	1962-64 1966-67 1969 1976	06-08-76 08-02-76 09-27-76	18.7 14.0 14.1
ISABELLE CREEK BASIN						
05355300	ISABELLE CREEK NEAR BAY CITY, WIS.	LAT 44°37'15", LONG 92°26'33", IN SE 1/4 SEC.28, T.25 N., R.17 W., PIERCE COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY EE, 2.5 MI (4.0 KM) NDRTH OF BAY CITY.	31.2	1964 1966-67 1969-70 1976	08-23-76	9.16
CHIPPEWA RIVER BASIN						
05355370	MOOSE RIVER NEAR CLAM LAKE, WIS.	LAT 45°49'14", LONG 90°51'30", IN SW 1/4 SEC.34, T.42 N., R.4 W., SAWYER COUNTY, ON COUNTY TRUNK HIGHWAY GG, 6.1 MI (9.8 KM) SOUTHEAST OF CLAM LAKE.	23.9	1969-72 1974-76	08-24-76	.07
05355420	HAY CREEK NEAR HAYWARD, WIS.	LAT 45°59'20", LONG 91°10'15", IN SW 1/4 SEC.31, T.41 N., R.6 W., SAWYER COUNTY, AT CULVERT ON COUNTRY ROAD, 15.0 MI (24.1 KM) EAST OF HAYWARD.	A 14.9	1967 1970-72 1974-76	08-23-76	4.04
05355530	EAST FORK CHIPPEWA RIVER NEAR GLIDDEN, WIS.	LAT 46°07'35", LONG 90°33'55", ON COMMON BOUNDARY OF SECS.12 AND 13, T.42 N., R.2 W., ASHLAND COUNTY, AT BRIDGE ON STATE HIGHWAY 13, 0.7 MI (1.1 KM) SOUTHEAST OF GLIDDEN.	A 94.6	1967 1970-76	08-24-76	20.8
05356320	LITTLE WEIRGOR CREEK AT EXELAND, WIS.	LAT 45°40'06", LONG 91°14'07", IN SW 1/4 SEC.22, T.37 N., R.7 W., SAWYER COUNTY, AT BRIDGE ON STATE HIGHWAY 48, AT EXELAND.	A 31.0	1963-64 1966-67 1976	08-25-76	12.4

* ALSO A CREST-STAGE GAGE.

A APPROXIMATELY.

OPERATED AS A CONTINUOUS-RECORD GAGING STATION.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1976

STATION	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	MEASUREMENTS		
				PERIOD OF RECORD	DATE	DISCHARGE (FT ³ /S)
CHIPPEWA RIVER BASIN--CONTINUED						
05356400	THORNAPPLE RIVER NEAR WINTER, WIS.	LAT 45°47'02", LONG 90°53'23", IN SE 1/4 SEC.8, T.38 N., R.4 W., SAWYER COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY W, 6.4 MI (10.3 KM) SOUTHEAST OF WINTER.	35.7	1962-64 1966-67 1976	08-25-76	2.19
05356450	LITTLE THORNAPPLE RIVER NEAR LADYSMITH, WIS.	LAT 45°35'05", LONG 91°06'43", IN SW 1/4 SEC.22, T.36 N., R.6 W., RUSK COUNTY, AT BRIDGE ON STATE HIGHWAY 27, 8.5 MI (13.7 KM) NORTH OF LADYSMITH.	A 18.0	1963-64 1966-67 1976	08-25-76	0.00
05356700	SOFT MAPLE CREEK NEAR BRUCE, WIS.	LAT 45°25'04", LONG 91°21'30", IN NE 1/4 SEC.21, T.34 N., R.8 W., RUSK COUNTY, AT BRIDGE ON COUNTRY ROAD, 4.9 MI (7.9 KM) SOUTHWEST OF BRUCE.	A 34.0	1963-64 1966-67 1976	08-25-76	3.26
05357350	LOST CREEK NEAR POWELL, WIS.	LAT 46°05'10", LONG 89°58'40", IN SE 1/4 SEC.27, T.42 N., R.4 E., IRON COUNTY, AT BRIDGE ON STATE HIGHWAY 47, 1.0 MI (1.6 KM) WEST OF POWELL.	14.5	1967 1969 1972-76	08-24-76	2.45
05359100	SPRINGSTEAD CREEK NEAR PARK FALLS, WIS.	LAT 45°55'55", LONG 90°06'40", IN SE 1/4 SEC.16, T.40 N., R.3 E., PRICE COUNTY, AT BRIDGE ON U.S. FOREST SERVICE ROAD 147, 16.0 MI (25.7 KM) EAST OF PARK FALLS.	A 21.4	1967 1970-72 1974-76	08-24-76	2.66
05359350	ELK RIVER NEAR PHILLIPS, WIS.	LAT 45°44'40", LONG 90°13'40", ON COMMON BOUNDARY OF SECS.33 AND 34, T.38 N., R.2 E., PRICE COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY H, 8.9 MI (14.3 KM) NORTHEAST OF PHILLIPS.	A 42.1	1967 1970-72 1974-76	08-24-76	3.69
*05359600	PRICE CREEK NEAR PHILLIPS, WIS.	LAT 45°43'33", LONG 90°40'12", IN SW 1/4 SEC.31, T.38 N., R.2 W., PRICE COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY W, 13.0 MI (20.9 KM) WEST OF PHILLIPS.	16.9	1961-64 1964-66 1967-69 1976	08-25-76	.88
05361100	DEER TAIL CREEK NEAR LADYSMITH, WIS.	LAT 45°23'33", LONG 91°06'37", IN NW 1/4 SEC.34, T.34 N., R.6 W., RUSK COUNTY, AT BRIDGE ON STATE HIGHWAY 27, 4.9 MI (7.9 KM) SOUTH OF LADYSMITH.	A 52.0	1963-64 1966-67 1976	08-25-76	0.00
05364120	BIG DRYWOOD CREEK NEAR CADOTT, WIS.	LAT 44°58'27", LONG 91°13'36", IN SW 1/4 SEC.22, T.29 N., R.7 W., CHIPPEWA COUNTY, AT BRIDGE ON COUNTRY ROAD, 4.4 MI (7.1 KM) NORTHWEST OF CADOTT.	35.4	1963-64 1966-67 1976	08-26-76	1.89
05364160	PAINT CREEK NEAR CHIPPEWA FALLS, WIS.	LAT 44°54'52", LONG 91°15'27", IN NW 1/4 SEC.17, T.28 N., R.7 W., CHIPPEWA COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY K, 6.3 MI (10.1 KM) EAST OF CHIPPEWA FALLS.	55.3	1963-64 1966-67 1973 1976	11-30-72 08-26-76	21.9 4.63
05365650	HAY CREEK NEAR FAIRCHILD, WIS.	LAT 44°41'01", LONG 90°49'49", IN NE 1/4 SEC.2, T.25 N., R.4 W., CLARK COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY I, 8.5 MI (13.7 KM) NORTHEAST OF FAIRCHILD.	28.1	1962-64 1966-67 1976	08-26-76	0.00
*05365700	GOGGLE-EYE CREEK NEAR THORP, WIS.	LAT 44°58'40", LONG 90°48'00", ON WEST BOUNDARY SEC.19, T.29 N., R.3 W., CLARK COUNTY, AT CULVERT ON STATE HIGHWAY 73, 1.3 MI (2.1 KM) NORTH OF THORP.	R 6.70	1961-66 1976	08-25-76	.06
05365900	WOLF RIVER NEAR STANLEY, WIS.	LAT 44°51'14", LONG 90°56'23", IN NW 1/4 SEC.1, T.27 N., R.5 W., EAU CLAIRE COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY H, 7.2 MI (11.6 KM) SOUTH OF STANLEY.	70.6	1963-64 1966-67 1976	08-25-76	.90
05366400	BEARGRASS CREEK NEAR FALL CREEK, WIS.	LAT 44°43'51", LONG 91°11'57", IN SW 1/4 SEC.14, T.26 N., R.7 W., EAU CLAIRE COUNTY, AT BRIDGE ON U.S. HIGHWAY 12, 4.3 MI (6.9 KM) SOUTHEAST OF FALL CREEK.	16.0	1962-64 1966-67 1976	08-24-76	4.32
05367060	MUDDY CREEK NEAR MENOMONIE, WIS.	LAT 44°48'00", LONG 91°46'02", IN SW 1/4 SEC.19, T.27 N., R.11 W., DUNN COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY J, 9.3 MI (15.0 KM) SOUTHEAST OF MENDMONIE.	67.1	1962-64 1966-67 1976	08-24-76	1.52

* ALSO A CREST-STAGE GAGE.
A APPROXIMATELY.
R REVISED.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1976

STATION	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	MEASUREMENTS	
					DATE	DISCHARGE (FT ³ /S)
CHIPPEWA RIVER BASIN--CONTINUED						
05367420	BARKER CREEK NEAR CAMERON, WIS.	LAT 45°24'31", LONG 91°47'11", IN SE 1/4 SEC.24, T.34 N., R.12 W., BARRON COUNTY, AT BRIDGE ON COUNTRY ROAD, 2.5 MI (4.0 KM) WEST OF CAMERON.	16.7	1963-64 1966-67 1976	08-25-76	1.21
05367430	YELLOW RIVER NEAR CUMBERLAND, WIS.	LAT 45°31'54", LONG 91°54'56", IN NE 1/4 SEC.12, T.35 N., R.13 W., BARRON COUNTY, AT BRIDGE ON STATE HIGHWAY 48, 5.2 MI (8.3 KM) EAST OF CUMBERLAND.	A 50.0	1963-64 1966-67 1976	08-26-76	11.1
*05367480	EAST BRANCH PINE CREEK TRIBUTARY NEAR DALLAS, WIS.	LAT 45°16'50", LONG 91°48'30", IN SW 1/4 SEC.1, T.32 N., R.12 W., BARRON COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY 0, 1.5 MI (2.4 KM) NORTH OF DALLAS.	3.85	1961 1963-67 1976	08-25-76	1.20
05367490	LOWER PINE CREEK NEAR SAND CREEK, WIS.	LAT 45°10'04", LONG 91°42'03", IN SW 1/4 SEC.14, T.31 N., R.11 W., DUNN COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY V, 0.7 MI (1.1 KM) WEST OF SAND CREEK.	50.4	1963-64 1966-67 1976	08-24-76	12.3
05367970	BEAVER CREEK NEAR DOWNING, WIS.	LAT 45°02'46", LONG 92°07'32", IN NW 1/4 SEC.31, T.30 N., R.14 W., DUNN COUNTY, AT BRIDGE ON STATE HIGHWAY 170, 0.1 MI (0.2 KM) EAST OF DOWNING.	17.7	1962-64 1966-67 1976	08-24-76	3.26
05368100	OTTER CREEK NEAR WHEELER, WIS.	LAT 45°03'36", LONG 91°52'43", IN SE 1/4 SEC.19, T.30 N., R.12 W., DUNN COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY N, 1.7 MI (2.7 KM) NORTHEAST OF WHEELER.	26.1	1962-64 1966-67 1973 1976	10-26-72 08-24-76	20.2 6.01
05369030	GILBERT CREEK NEAR MENOMONIE, WIS.	LAT 44°52'27", LONG 91°56'30", IN SE 1/4 SEC.27, T.28 N., R.13 W., DUNN COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY P, 0.6 MI (1.0 KM) WEST OF MENOMONIE.	36.2	1962-64 1966-67 1973 1976	10-26-72 08-24-76	23.6 18.1
*05370900	SPRING CREEK NEAR DURAND, WIS.	LAT 44°34'13", LONG 91°57'48", IN S 1/2 SEC.9, T.24 N., R.13 W., BUFFALO COUNTY, AT BRIDGE ON COUNTRY ROAD, 4.0 MI (6.4 KM) SOUTH OF DURAND.	6.49	1962-69 1976	08-23-76	3.83
TREMPEALEAU RIVER BASIN						
05379200	TREMPEALEAU RIVER AT TAYLOR, WIS.	LAT 44°19'38", LONG 91°07'30", ON EAST BOUNDARY SEC.5, T.21 N., R.6 W., JACKSON COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY P, 0.4 MI (0.6 KM) NORTH OF TAYLOR.	110	1964 1966-70 1972-73 1976	08-20-76	43.8
05379500	ELK CREEK AT ELK CREEK, WIS.	LAT 44°25'43", LONG 91°24'02", IN SW 1/4 SEC.31, T.23 N., R.8 W., TREMPEALEAU COUNTY, AT BRIDGE ON STATE HIGHWAY 93, AT ELK CREEK.	90.1	1964 1966-70 1976	08-20-76	29.5
BLACK RIVER BASIN						
05381170	ROCK CREEK NEAR NEILLSVILLE, WIS.	LAT 44°26'21", LONG 90°35'56", IN SW 1/4 SEC.26, T.23 N., R.2 W., CLARK COUNTY, AT BRIDGE ON COUNTRY ROAD, 8.4 MI (13.5 KM) SOUTH OF NEILLSVILLE.	A 25.0	1962-64 1966-67 1970 1975-76	08-31-76	0.00
05381350	LEVIS CREEK NEAR BLACK RIVER FALLS, WIS.	LAT 44°18'42", LONG 90°48'23", IN SE 1/4 SEC.12, T.21 N., R.4 W., JACKSON COUNTY, AT BRIDGE ON STATE HIGHWAY 54, 2.2 MI (3.5 KM) NORTHEAST OF BLACK RIVER FALLS.	39.7	1964 1966-70 1974-76	09-01-76	9.85
05381450	BIG CREEK NEAR CATARACT, WIS.	LAT 44°08'08", LONG 90°54'26", IN SW 1/4 SEC.7, T.19 N., R.4 W., MONROE COUNTY, AT BRIDGE ON COUNTRY ROAD, 4.6 MI (7.4 KM) NORTHWEST OF CATARACT.	64.0	1964 1966-70 1975-76	09-01-76	43.8
05381800	FLEMING CREEK AT STEVENSTOWN, WIS.	LAT 44°02'17", LONG 91°10'09", IN NW 1/4 SEC.13, T.18 N., R.7 W., LA CROSSE COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY T, AT STEVENSTOWN.	28.5	1966-70 1975-76	09-02-76	11.6

* ALSO A CREST-STAGE GAGE.
A APPROXIMATELY.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1976

STATION	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	MEASUREMENTS	
					DATE	DISCHARGE (FT ³ /S)
BLACK RIVER BASIN--CONTINUED						
05382100	SOUTH FORK BEAVER CREEK AT ETTRICK, WIS.	LAT 44°09'55", LONG 91°16'05", IN W 1/2 SEC.31, T.20 N., R.7 W., TREMPEREAU COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY D, AT ETTRICK.	33.1	1964 1966-70 1975-76	09-01-76	8.71
LA CROSSE RIVER BASIN						
05382280	SILVER CREEK NEAR SPARTA, WIS.	LAT 43°56'30", LONG 90°40'49", IN NW 1/4 SEC.24, T.17 N., R.3 W., MONROE COUNTY, AT BRIDGE ON U.S. HIGHWAY 16, 6.5 MI (10.5 KM) EAST OF SPARTA.	14.7	1964 1966-70 1976	08-19-76	7.24
*05382500	LITTLE LA CROSSE RIVER NEAR LEON, WIS.	LAT 43°53'45", LONG 90°50'25", IN NE 1/4 SEC.3, T.16 N., R.4 W., MONROE COUNTY, 30 FT (9 M) UPSTREAM FROM BRIDGE ON COUNTRY ROAD, 1.5 MI (2.4 KM) NORTHWEST OF LEON.	77.1	1934-61 1963-70 1976	08-18-76	35.0
BAD AXE RIVER BASIN						
*05387100	NORTH FORK BAD AXE RIVER NEAR GENOA, WIS.	LAT 43°33'10", LONG 91°08'58", IN SW 1/4 SEC.36, T.13 N., R.7 W., VERNON COUNTY, AT BRIDGE ON STATE HIGHWAY 56, 4.1 MI (6.6 KM) SOUTHEAST OF GENOA.	R 80.9	1961 1963-64 B 1964-66 C 1967-70 1976	06-28-76 08-17-76	37.5 35.2
RUSH CREEK BASIN						
05388370	RUSH CREEK NEAR FERRYVILLE, WIS.	LAT 43°23'22", LONG 91°07'36", IN NW 1/4 SEC.32, T.11 N., R.6 W., CRAWFORD COUNTY, AT BRIDGE ON COUNTRY ROAD, 2.5 MI (4.0 KM) NORTHWEST OF FERRYVILLE.	44.8	1963 1966-70 1976	06-28-76 08-17-76	22.7 23.3
COPPER CREEK BASIN						
05388380	COPPER CREEK NEAR MT. STERLING, WIS.	LAT 43°18'58", LONG 90°59'59", IN NW 1/4 SEC.29, T.10 N., R.5 W., CRAWFORD COUNTY, AT BRIDGE ON COUNTRY ROAD, 4.2 MI (6.8 KM) WEST OF MT. STERLING.	14.1	1963 1966-70 1972 1976	06-28-76 08-17-76	7.78 7.78
WISCONSIN RIVER BASIN						
05390140	MUSKRAT CREEK AT CONOVER, WIS.	LAT 46°03'27", LONG 89°15'24", IN SE 1/4 SW 1/4 SEC.4, T.41 N., R.8 E., VILAS COUNTY, ON U.S. HIGHWAY 45, AT CONDVER.	R 10.2	1969-70 1972-76	09-15-76	2.26
05390180	WISCONSIN RIVER AT CONOVER, WIS.	LAT 46°02'52", LONG 89°15'57", IN NE 1/4 SEC.8, T.41 N., R.10 E., VILAS COUNTY, AT BRIDGE DN COUNTY TRUNK HIGHWAY K, 0.5 MI (0.8 KM) DOWNSTREAM FROM PIONEER CREEK, 0.6 MI (1.0 KM) SOUTHWEST OF CONOVER.	R 177	1967-71# 1973-76	09-15-76	73.0
05390450	DEERSKIN RIVER NEAR EAGLE RIVER, WIS.	LAT 46°00'11", LONG 89°04'30", IN NW 1/4 SW 1/4 SEC.25, T.41 N., R.11 E., VILAS COUNTY, ON U.S. FOREST SERVICE ROAD 2178, 10.5 MI (16.9 KM) NORTHEAST OF EAGLE RIVER.	R 32.4	1969-70 1972-76	09-15-76	16.0
05391200	MONICO CREEK NEAR MONICO, WIS.	LAT 45°34'39", LONG 89°08'57", IN SW 1/4 NW 1/4 SEC.29, T.36 N., R.11 E., ONEIOA COUNTY, ON U.S. HIGHWAY 45, 0.3 MI (0.5 KM) NORTHEAST OF MONICO.	R 20.8	1969-70 1972-76	09-14-76	.41
05391250	GUOEGAST CREEK NEAR RHINELANDER, WIS.	LAT 45°42'27", LONG 89°14'40", IN NE 1/4 SE 1/4 SEC.9, T.37 N., R.10 E., ONEIOA COUNTY, ON TOWN ROAD, 9.5 MI (15.3 KM) NORTHEAST OF RHINELANDER.	R 12.4	1969-70 1972-76	09-15-76	.40

* ALSO A CREST-STAGE GAGE.

B OPERATED AS A SEASONAL CONTINUOUS-RECORD GAGING STATION.

C OPERATED AS A SEASONAL CONTINUOUS-RECORD GAGING STATION WITHOUT RECORDS BEING PUBLISHED.

R REVISED.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1976

STATION	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	MEASUREMENTS			
				PERIOD OF RECORD	DATE	DISCHARGE (FT ³ /S)	
WISCONSIN RIVER BASIN--CONTINUED							
05391900	NOISY CREEK NEAR RHINELANDER, WIS.	LAT 45°33'21", LONG 89°26'54", IN SW 1/4 SW 1/4 SEC.36, T.36 N., R.8 E., ONEIDA COUNTY, ON STATE HIGHWAY 13, 6.0 MI (9.6 KM) SOUTHWEST OF RHINELANDER.	R 35.6	1969-70 1972-76	09-16-76	5.93	
05392290	WILLOW RIVER NEAR HAZELHURST, WIS.	LAT 45°45'37", LONG 90°01'28", IN SE 1/4 SEC.19, T.38 N., R.4 E., ONEIDA COUNTY, AT CULVERT ON COUNTRY ROAD, 14.9 MI (24.0 KM) WEST OF HAZELHURST.	R 9.92	1969-76	09-15-76	0.00	
05392320	ROCKY RUN NEAR GOODNOW, WIS.	LAT 45°41'37", LONG 89°45'31", IN SE 1/4 SEC.17, T.37 N., R.6 E., ONEIDA COUNTY, ON COUNTRY ROAD, 4.3 MI (6.9 KM) WEST OF GOODNOW.	R 23.2	1969-76	09-16-76	11.5	
05392450	LITTLE RICE RIVER NEAR BRADLEY, WIS.	LAT 45°35'43", LONG 89°49'28", IN NE 1/4 SEC.23, T.36 N., R.5 E., ONEIDA COUNTY, AT CULVERT ON KELLY FIRE LANE, 5.4 MI (8.7 KM) NORTHWEST OF BRADLEY.	R 21.4	1969-76	09-16-76	.17	
05393200	SOMO RIVER NEAR TRIPOLI, WIS.	LAT 45°32'20", LONG 89°58'10", IN NW 1/4 SEC.10, T.35 N., R.4 E., LINCOLN COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY T, 1.8 MI (2.9 KM) SOUTHEAST OF TRIPOLI.	R 43.5	1967 1969-76	09-15-76	.83	
05393630	LITTLE PINE CREEK NEAR TOMAHAWK, WIS.	LAT 45° 23'30", LONG 89°39'05", ON COMMON BOUNDARY OF SECS.31 AND 32, T.34 N., R.7 E., LINCOLN COUNTY, AT CULVERTS ON COUNTY TRUNK HIGHWAY V, 6.5 MI (10.5 KM) SOUTHEAST OF TOMAHAWK.	R 21.0	1967 1969-76	09-16-76	4.51	
05395030	PINE RIVER NEAR MERRILL, WIS.	LAT 45°11'27", LONG 89°27'58", IN NW 1/4 SEC.11, T.31 N., R.8 E., LINCOLN COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY X, 10.8 MI (17.4 KM) EAST OF MERRILL.	R 55.2	1962-64 1966-67 1976	09-14-76	5.23	
05395130	TRAPPE RIVER NEAR WAUSAU, WIS.	LAT 45°04'09", LONG 89°34'07", IN NW 1/4 SEC.21, T.30 N., R.8 E., MARATHON COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY WW, 8.4 MI (13.5 KM) NORTH OF WAUSAU.	R 73.6	1962-64 1966-67 1976	09-14-76	1.80	
05397200	SPRING BROOK NEAR ANTIAGO, WIS.	LAT 45°04'18", LONG 89°13'26", IN NW 1/4 SEC.19, T.30 N., R.11 E., LANGLADE COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY H, 5.9 MI (9.5 KM) SOUTHWEST OF ANTIAGO.	R 63.9	1962-64 1966-67 1976	09-14-76	13.3	
05399210	RANDALL CREEK NEAR COLBY, WIS.	LAT 44°54'08", LONG 90°11'32", IN SW 1/4 SEC.18, T.28 N., R.3 E., MARATHON COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY N, 6.2 MI (10.0 KM) EAST OF COLBY.	R 30.9	1963-64 1966-67 1976	07-08-76	.20	
05400700	MILL CREEK NEAR JUNCTION CITY, WIS.	LAT 44°33'10", LONG 89°48'28", IN NE 1/4 SEC.20, T.24 N., R.6 E., PORTAGE COUNTY, AT BRIDGE ON STATE HIGHWAY 34, 3.3 MI (5.3 KM) SOUTHWEST OF JUNCTION CITY.	R 68.7	1963-64 1966-67 1976	07-09-76 09-13-76	.32 0.00	
05400950	MOCCASIN CREEK AT NEKOOSA, WIS.	LAT 44°20'37", LONG 89°53'44", IN NW 1/4 SEC.34, T.22 N., R.5 E., WOOD COUNTY, AT BRIDGE ON STATE HIGHWAY 54, 1.9 MI (3.1 KM) NORTH OF NEKOOSA.	R 22.3	1962-64 1966-67 1976	07-07-76 09-13-76	3.49 2.32	
05403400	BEAR CREEK NEAR CAMP DOUGLAS, WIS.	LAT 43°58'36", LONG 90°18'47", ON EAST BOUNDARY SEC.1, T.17 N., R.1 E., MONROE COUNTY, AT BRIDGE ON COUNTRY ROAD, 4.5 MI (7.2 KM) NORTHWEST OF CAMP DOUGLAS.	R 33.2	1964 1966-67 1969-70 1976	06-22-76 08-11-76	8.75 5.34	
05404100	BARABOO RIVER NEAR UNION CENTER, WIS.	LAT 43°42'18", LONG 90°15'59", IN SW 1/4 SEC.9, T.14 N., R.2 E., JUNEAU COUNTY, AT BRIDGE ON STATE HIGHWAYS 80 AND 82, 1.4 MI (2.3 KM) NORTH OF UNION CENTER.	R 73.1	1964 1966-70 1976	06-23-76 08-10-76	22.8 18.1	

R REVISED.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEDUS SITES

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1976

STATION	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	MEASUREMENTS	
					DATE	DISCHARGE (FT ³ /S)
WISCONSIN RIVER BASIN--CONTINUED						
*05405600	ROWAN CREEK AT POYNETTE, WIS.	LAT 43°23'13", LONG 89°23'25", IN S 1/2 SEC.35, T.11 N., R.9 E., COLUMBIA COUNTY, AT BRIDGE ON U.S. HIGHWAY 51, AT POYNETTE.	R 10.4	1961-67 1970 1976	10-10-75	6.22
05405800	SPRING CREEK AT LODI, WIS.	LAT 43°19'00", LONG 89°31'40", IN NE 1/4 SEC.27, T.10 N., R.8 E., COLUMBIA COUNTY, AT BRIDGE ON TOWN ROAD, AT LODI.	37.0	1962-67 1976	10-10-75 06-01-76	22.4 21.3
05406200	HONEY CREEK NEAR PLAIN, WIS.	LAT 43°15'32", LONG 89°57'18", ON EAST BOUNDARY SEC.13, T.9 N., R.4 E., SAUK COUNTY, AT BRIDGE ON COUNTRY ROAD, 5.0 MI (8.0 KM) EAST OF PLAIN.	R 55.9	1963 1966-70 1976	10-07-75 06-01-76	14.8 14.2
05406300	HONEY CREEK NEAR SAUK CITY, WIS.	LAT 43°15'35", LONG 89°48'15", IN NE 1/4 SEC.17, T.9 N., R.6 E., SAUK COUNTY, AT BRIDGE ON STATE HIGHWAY 60, 4.3 MI (6.9 KM) WEST OF SAUK CITY.	R 187	1963 1966-70 1976	10-09-75 06-01-76	47.4 48.6
05406600	MILL CREEK NEAR SPRING GREEN, WIS.	LAT 43°09'15", LONG 90°01'39", IN SW 1/4 SEC.21, T.8 N., R.4 E., IOWA COUNTY, AT BRIDGE DN COUNTRY ROAD, 2.3 MI (3.7 KM) SOUTHEAST OF SPRING GREEN.	R 96.8	1963 1966-70 1976	10-07-75 05-28-76	47.4 59.7
05406650	OTTER CREEK NEAR CLYDE, WIS.	LAT 43°06'49", LONG 90°12'47", IN NE 1/4 SEC.2, T.7 N., R.2 E., IOWA COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY I, 0.5 MI (0.8 KM) SOUTH OF CLYDE.	R 95.6	1963 1966-70 1976	10-07-75 05-28-76	43.6 52.1
05406700	BEAR CREEK NEAR LONE ROCK, WIS.	LAT 43°12'55", LONG 90°13'28", IN NW 1/4 SEC.35, T.9 N., R.2 E., RICHLAND COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY JJ, 2.5 MI (4.0 KM) NORTHEAST OF LONE ROCK.	R 65.5	1963 1966-70 1976	10-10-75 05-28-76	26.4 30.8
05406750	PINE RIVER NEAR BUCK CREEK, WIS.	LAT 43°24'30", LONG 90°21'40", IN NW 1/4 SEC.27, T.11 N., R.1 E., RICHLAND COUNTY, AT BRIDGE ON STATE HIGHWAY 80, 1.0 MI (1.6 KM) SOUTH OF BUCK CREEK.	R 128	1963 1966-70 1976	10-09-75 05-28-76	74.9 80.6
05406820	PINE RIVER NEAR RICHLAND CENTER, WIS.	LAT 43°18'28", LONG 90°21'03", IN SE 1/4 SEC.27, T.10 N., R.1 E., RICHLAND COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY O, 2.5 MI (4.0 KM) SOUTHEAST OF RICHLAND CENTER.	198	1963 1966-70 1972-73 1976	10-07-75	104
05406850	ASH CREEK NEAR RICHLAND CENTER, WIS.	LAT 43°17'15", LONG 90°20'06", IN NE 1/4 SEC.2, T.9 N., R.1 E., RICHLAND COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY TB, 4.0 MI (6.4 KM) SOUTHEAST OF RICHLAND CENTER.	18.4	1966-70 1976	10-07-75 05-28-76	5.34 5.73
05406890	WILLOW CREEK NEAR RICHLAND CENTER, WIS.	LAT 43°16'46", LONG 90°18'14", IN SW 1/4 SEC.6, T.9 N., R.2 E., RICHLAND COUNTY, 100 FT (30 M) ABOVE BRIDGE ON U.S. HIGHWAY 14, 6.0 MI (9.7 KM) SOUTHEAST OF RICHLAND CENTER.	R 82.5	1966-70 1976	10-07-75 05-28-76	40.5 45.6
05407050	FENNIMORE CREEK NEAR BLUE RIVER, WIS.	LAT 43°07'07", LONG 90°31'59", ON SOUTH BOUNDARY SEC.31, T.8 N., R.1 W., GRANT COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY M, 5.0 MI (8.0 KM) SOUTH OF BLUE RIVER.	77.2	1963 1966-70 1976	07-23-76	35.3
*05407100	RICHLAND CREEK NEAR PLUGTOWN, WIS.	LAT 43°11'12", LONG 90°44'23", IN NW 1/4 SEC.9, T.8 N., R.3 W., CRAWFORD COUNTY, AT BRIDGE ON U.S. HIGHWAY 61, 2.0 MI (3.2 KM) SOUTH OF PLUGTOWN.	R 19.2	1961 1963-70 1976	10-08-75 05-27-76	10.1 5.44
*05407200	CROOKED CREEK NEAR BOSCOBEL, WIS.	LAT 43°06'27", LONG 90°42'18", IN SE 1/4 SEC.2, T.7 N., R.3 W., GRANT COUNTY, AT BRIDGE ON U.S. HIGHWAY 61, 1.6 MI (2.6 KM) SOUTH OF BOSCOBEL.	R 12.9	1961 1963-70 1976	10-08-75 05-27-76	11.8 8.35
05408700	WEST FORK KICKAPOO RIVER NEAR VIROQUA, WIS.	LAT 43°33'43", LONG 90°45'39", IN NW 1/4 SEC.32, T.13 N., R.3 W., VERNON COUNTY, AT BRIDGE ON STATE HIGHWAY 82, 6.3 MI (10.1 KM) EAST OF VIROQUA.	R 63.5	1963-64 1966-70 1976	10-08-75 05-27-76	29.0 32.5

* ALSO A CREST-STAGE GAGE.
R REVISED.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1976

STATION	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	MEASUREMENTS		
				PERIOD OF RECORD	DATE	DISCHARGE (FT ³ /S)
WISCONSIN RIVER BASIN--CONTINUED						
05409800	TANTER CREEK NEAR GAYS MILLS, WIS.	LAT 43°22'13", LONG 90°51'41", IN SW 1/4 SEC.4, T.10 N., R.4 W., CRAWFORD COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY 8, 3.5 MI (5.6 KM) NORTH OF GAYS MILLS.	38.3	1963 1966-70 1976	10-08-75 05-27-76	21.3 22.5
05410600	PINE CREEK NEAR STEBEN, WIS.	LAT 43°10'23", LONG 90°53'32", IN NE 1/4 SEC.18, T.8 N., R.4 W., CRAWFORD COUNTY, AT BRIDGE ON COUNTRY ROAD, 2.5 MI (4.0 KM) WEST OF STEBEN.	R 26.6	1963 1966-70 1976	10-06-75 05-27-76	17.5 12.6
05411000	GRAN GRAE CREEK NEAR WAUZEKA, WIS.	LAT 43°02'36", LONG 90°59'16", IN NE 1/4 SEC.32, T.7 N., R.5 W., CRAWFORD COUNTY, AT BRIDGE ON STATE HIGHWAY 60, 6.0 MI (9.7 KM) SOUTHWEST OF WAUZEKA.	17.1	1963 1966-70 1976	10-08-75 05-27-76	7.55 8.35
SANDY CREEK BASIN						
05411510	SANDY CREEK NEAR BAGLEY, WIS.	LAT 42°52'45", LONG 91°04'30", IN NW 1/4 SEC.27, T.5 N., R.6 W., GRANT COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY A, 2.1 MI (3.4 KM) SOUTHEAST OF BAGLEY.	18.9	1963 1966-70 1976	10-17-75 07-27-76	6.98 4.30
GRANT RIVER BASIN						
*05413400	PIGEON CREEK NEAR LANCASTER, WIS.	LAT 42°49'00", LONG 90°43'20", IN SW 1/4 SEC.15, T.4 N., R.3 W., GRANT COUNTY, AT CULVERT ON COUNTRY ROAD, 2.0 MI (3.2 KM) SOUTH OF LANCASTER.	R 6.93	1961 1963-64 B 1964-66# C 1967-70 1972-73 1976	10-17-75 07-26-76	3.01 4.10
05413450	RATTLESNAKE CREEK NEAR CASSVILLE, WI	LAT 42°46'28", LONG 90°55'18", IN SE 1/4 SEC.35, T.4 N., R.5 W., GRANT COUNTY, AT BRIDGE ON STATE HIGHWAY 81, 5.0 MI (8.0 KM) NORTHEAST OF CASSVILLE.	44.7	1963 1966-70 1976	10-17-75 07-27-76	14.6 9.44
05413600	BOICE CREEK NEAR POTOSI, WIS.	LAT 42°43'43", LONG 90°45'35", IN SW 1/4 SEC.17, T.3 N., R.3 W., GRANT COUNTY, 600 FT (183 M) BELOW BRIDGE ON COUNTY TRUNK HIGHWAY U, 4.0 MI (6.4 KM) NORTHWEST OF POTOSI.	R 26.3	1966-70 1976	10-16-75 07-27-76	9.95 6.16
PLATTE RIVER BASIN						
05414150	LITTLE PLATTE RIVER NEAR PLATTEVILLE, WIS.	LAT 42°45'23", LONG 90°29'40", IN SE 1/4 SEC.4, T.3 N., R.1 W., GRANT COUNTY, AT BRIDGE ON STATE HIGHWAY 81, 1.9 MI (3.1 KM) NORTHWEST OF PLATTEVILLE.	54.0	1963 1966-70 1976	10-16-75 07-26-76	15.8 6.96
05414250	BLOCKHOUSE CREEK NEAR DICKEYVILLE, WIS.	LAT 42°39'22", LONG 90°34'24", IN SW 1/4 SEC.11, T.2 N., R.2 W., GRANT COUNTY, AT BRIDGE ON U.S. HIGHWAY 151, 2.5 MI (4.0 KM) NORTH OF DICKEYVILLE.	36.3	1963 1966-71 1976	10-16-75 07-27-76	13.8 8.50
SINSINAWA RIVER BASIN						
05414000	SINSINAWA RIVER NEAR HAZEL GREEN, WIS.	LAT 42°32'02", LONG 90°28'53", IN NW 1/4 SEC.27, T.1 N., R.1 W., GRANT COUNTY, AT BRIDGE ON STATE HIGHWAY 11, 2.5 MI (4.0 KM) WEST OF HAZEL GREEN.	R 24.9	1963 1966-70 1976	10-15-75	8.28

* ALSO A CREST-STAGE GAGE.

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R REVISED.

OPERATED AS A CONTINUOUS-RECORD GAGING STATION.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1976

STATION	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	MEASUREMENTS			
				PERIOD OF RECORD	DATE	DISCHARGE (FT ³ /S)	
ROCK RIVER BASIN							
05430600	BASS CREEK NEAR JANESVILLE, WIS.	LAT 43°37'20", LONG 89°07'45", IN NE 1/4 SEC.24, T.2 N., R.11 E., ROCK COUNTY, AT BRIDGE ON COUNTRY ROAD, 6.7 MI (10.8 KM) SOUTHWEST OF JANESVILLE.	58.1	1962-69 1976	07-27-76	15.2	
05432100	PECATONICA RIVER NEAR MINERAL POINT, WIS.	LAT 42°48'43", LONG 90°15'30", IN NE 1/4 SEC.21, T.4 N., R.2 E., LAYFAYETTE COUNTY, AT BRIDGE ON U.S. HIGHWAY 151, 5.0 MI (8.0 KM) SOUTHWEST OF MINERAL POINT.	68.8	1963 1966-70 1976	10-09-75 09-14-76	29.1 11.7	
05432550	AMES BRANCH NEAR DARLINGTON, WIS.	LAT 42°39'26", LONG 90°05'34", IN SW 1/4 SEC.12, T.2 N., R.3 E., LAYFAYETTE COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY K, 2.2 MI (3.5 KM) SOUTHEAST OF DARLINGTON.	44.3	1963 1966-70 1976	09-14-76	4.47	
05432645	SPAFFORD CREEK NEAR SOUTH WAYNE, WIS.	LAT 42°33'29", LONG 89°53'50", IN NW 1/4 SEC.15, T.1 N., R.5 E., LAYFAYETTE COUNTY, AT BRIDGE ON COUNTRY ROAD, 1.1 MI (1.8 KM) SOUTHWEST OF SOUTH WAYNE.	R 43.4	1968-70 1976	10-08-75 07-27-76 09-13-76	11.2 6.81 5.19	
05432800	DODGE BRANCH AT HOLLANDALE, WIS.	LAT 42°52'49", LONG 89°56'18", IN NE 1/4 SEC.30, T.5 N., R.5 E., IOWA COUNTY, AT BRIDGE ON STATE HIGHWAY 191, AT HOLLANDALE.	R 66.0	1963 1966-70 1972-73 1976	10-08-75 07-27-76 09-15-76	27.5 20.3 18.2	
05433700	WHITESIDE CREEK NEAR ARGYLE, WIS.	LAT 42°40'10", LONG 89°53'13", IN SW 1/4 SEC.3, T.2 N., R.5 E., LAYFAYETTE COUNTY, AT BRIDGE ON STATE HIGHWAY 78, 2.4 MI (3.9 KM) SOUTHWEST OF ARGYLE.	19.9	1963 1966-70 1976	10-08-75 07-27-76 09-14-76	6.14 4.41 3.64	
05434300	JORDON CREEK NEAR BROWNTOWN, WIS.	LAT 42°36'38", LONG 89°47'08", ON SOUTH BOUNDARY SEC.28, T.2 N., R.6 E., GREEN COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY M, 2.3 MI (3.7 KM) NORTH OF BROWNTOWN.	R 14.3	1963 1966-70 1976	10-08-75 07-27-76 09-13-76	4.91 3.70 3.16	
*05437200	EAST FORK RACCOON CREEK TRIBUTARY NEAR BELOIT, WIS.	LAT 42°30'44", LONG 89°06'40", ON COMMON BOUNDARY OF SECS.30 AND 31, T.1 N., R.12 E., ROCK COUNTY, AT CULVERT ON STATE HIGHWAY 81, 2.9 MI (4.7 KM) WEST OF BELOIT.	4.67	1961-68 1976	07-27-76	1.79	

* ALSO A CREST-STAGE GAGE.
R REVISED.

CREST-STAGE PARTIAL-RECORD STATIONS

THE FOLLOWING TABLE CONTAINS ANNUAL MAXIMUM DISCHARGES FOR CREST-STAGE STATIONS. A CREST-STAGE GAGE IS A DEVICE WHICH WILL REGISTER THE PEAK STAGE OCCURRING BETWEEN INSPECTIONS OF THE GAGE. A STAGE-DISCHARGE RELATION FOR EACH GAGE IS DEVELOPED FROM DISCHARGE MEASUREMENTS MADE BY INDIRECT MEASUREMENTS OF PEAK FLOW DR BY CURRENT METER. THE DATE OF THE MAXIMUM DISCHARGE IS NOT ALWAYS CERTAIN BUT IS USUALLY DETERMINED BY COMPARISON WITH NEARBY CONTINUOUS-RECORD STATIONS, WEATHER RECORDS, OR LOCAL INQUIRY. ONLY THE MAXIMUM DISCHARGE FOR EACH WATER YEAR IS GIVEN. INFORMATION ON SOME LOWER FLOODS MAY HAVE BEEN OBTAINED BUT IS NOT PUBLISHED HEREIN. THE YEARS GIVEN IN THE PERIOD OF RECORD REPRESENT WATER YEARS FOR WHICH THE ANNUAL MINIMUM HAS BEEN DETERMINED.

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	ANNUAL MAXIMUM		
					DATE	GAGE HEIGHT (FT)	DISCHARGE (FT ³ /S)
STREAMS TRIBUTARY TO LAKE SUPERIOR							
04024400	STONY BROOK NEAR SUPERIOR, WIS.	LAT 46°35'01", LONG 92°07'10", IN SE 1/4 SEC.4, T.47 N., R.14 W., DOUGLAS COUNTY, AT BOX CULVERT ON STATE HIGHWAY 35, 12.5 MI (20.1 KM) SOUTH OF TOLL BRIDGE ON U.S. HIGHWAYS 2 AND 35 AT ST. LOUIS RIVER AT SUPERIOR.	2.20	1959-76	04-02-76	18.60	300
04025200	PEARSON CREEK NEAR MAPLE, WIS.	LAT 46°38'51", LONG 91°42'55", ON COMMON BOUNDARY OF SECS.11 AND 14, T.48 N., R.11 W., DOUGLAS COUNTY, AT BOX CULVERT ON STATE HIGHWAY 13, 4.0 MI (6.4 KM) NORTH OF MAPLE.	4.01	1957-76	04-02-76	12.62	255
04026200	SAND RIVER TRIBUTARY NEAR RED CLIFF, WIS.	LAT 46°53'53", LONG 90°56'47", IN NE 1/4 SEC.14, T.51 N., R.5 W., BAYFIELD COUNTY, AT BOX CULVERT ON STATE HIGHWAY 13, 8.0 MI (12.9 KM) NORTHWEST OF RED CLIFF.	1.14	1959-76	04-02-76	10.93	95
*04026300	SIOUX RIVER NEAR WASHBURN, WIS.	LAT 46°41'20", LONG 90°57'02", IN NE 1/4 SEC.35, T.49 N., R.5 W., BAYFIELD COUNTY, ON COUNTY TRUNK HIGHWAY C, 2.5 MI (4.0 KM) WEST OF WASHBURN.	D 35.2	1959-65 1966# 1967-76	04-05-76	11.54	365
*04026400	SPILLERBERG CREEK NEAR CAYUGA, WIS.	LAT 46°13'48", LONG 90°37'32", IN NW 1/4 SEC.21, T.43 N., R.2 W., ASHLAND COUNTY, AT CONCRETE CULVERT PIPE ON STATE HIGHWAY 13, 4.2 MI (6.8 KM) SOUTHEAST OF CAYUGA.	6.18	1958-76	04-02-76	12.06	82
04026450	BAD RIVER NEAR MELLEN, WIS.	LAT 46°16'14", LONG 90°42'26", IN NE 1/4 NW 1/4 SEC.26, T.44 N., R.3 W., ASHLAND COUNTY, ON LEFT BANK 150 FT (45.7 M) DOWNSTREAM FROM BRIDGE ON U.S. FOREST SERVICE ROAD, 4.4 MI (7.1 KM) SOUTHEAST OF MELLEN.	83.4	1971-75# 1976	03-31-76	4.50	710
04026700	TROUT BROOK TRIBUTARY NEAR MARENGO, WIS.	LAT 46°23'04", LONG 90°47'04", IN NE 1/4 SEC.7, T.45 N., R.3 W., ASHLAND COUNTY, AT BOX CULVERT ON STATE HIGHWAY 13, 2.6 MI (4.2 KM) SOUTHEAST OF MARENGO.	.77	1960-76	04-02-76	11.35	144
04026850	APPLE CREEK NEAR UPSON, WIS.	LAT 46°28'45", LONG 90°24'18", IN SE 1/4 SEC.30, T.45 N., R.1 E., IRON COUNTY, AT 2-BARREL CORRUGATED CULVERT ON GRAVELED O'BRIEN LAKE ROAD, 1.5 MI (2.4 KM) SOUTH OF UPSON.	5.39	1970-76	04-02-76	12.49	80
*04027200	PEARL CREEK AT GRANDVIEW, WIS.	LAT 46°22'05", LONG 91°05'27", IN NE 1/4 SEC.22, T.45 N., R.6 W., BAYFIELD COUNTY, AT BOX CULVERT ON U.S. HIGHWAY 63, 0.8 MI (1.3 KM) EAST OF GRANDVIEW.	E 16.9	1960-76	04-02-76	11.83	180
*04029700	BOOMER CREEK NEAR SAXON, WIS.	LAT 46°29'40", LONG 90°21'02", IN N 1/2 SEC.3, T.46 N., R.1 E., IRON COUNTY, AT CONCRETE CULVERT PIPE ON U.S. HIGHWAY 2, 3.0 MI (4.8 KM) EAST OF SAXON.	5.94	1958-76	1976	C	f

- * ALSO A LOW-FLOW PARTIAL-RECORD STATION.
 # OPERATED AS A CONTINUOUS-RECORD GAGING STATION.
 / DISCHARGE NOT DETERMINED.
 C GAGE NOT OPERATING.
 D INCLUDES 20.3 SQ MI WITHOUT SURFACE DRAINAGE.
 E INCLUDES 6.4 SQ MI WITHOUT SURFACE DRAINAGE.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	ANNUAL MAXIMUM DISCHARGE		
					DATE	GAGE HEIGHT (FT)	DISCHARGE (FT ³ /S)
STREAMS TRIBUTARY TO LAKE MICHIGAN							
*04059900	ALLEN CREEK TRIBUTARY NEAR ALVIN, WIS.	LAT 45°58'05", LONG 88°47'24", ON NORTH BOUNDARY SEC.7, T.40 N., R.14 E., FOREST COUNTY, AT CULVERT ON STATE HIGHWAY 70, 2.2 MI (3.5 KM) SOUTHEAST OF ALVIN.	A 1.90	1960-76	05-16-76	10.20	6
04063640	NORTH BRANCH PINE RIVER AT WINDSOR DAM NEAR ALVIN, WIS.	LAT 45°55'43", LONG 88°51'38", IN SE 1/4 SEC.21, T.40 N., R.13 E., FOREST COUNTY, AT BRIDGE ON COUNTRY ROAD, AT WINDSOR DAM, 3.8 MI (6.1 KM) UPSTREAM FROM CONFLUENCE OF NORTH AND SOUTH FORKS, 4.0 MI (6.4 KM) SWEST OF ALVIN.	27.8	1967-68# 1970-76	04-02-76	2.76	84
04063688	SOUTH BRANCH POPPLE RIVER NEAR NEWALD, WIS.	LAT 45°44'42", LONG 88°35'31", IN NW 1/4 SEC.26, T.38 N., R.15 E., FLORENCE COUNTY, AT CORRUGATED TWIN BARREL CULVERTS ON U.S. FOREST SERVICE ROAD 2159, 8.4 MI (8.7 KM) EAST OF NEWALD.	9.85	1970-76	05-16-76	11.89	46
*04063600	WOODS CREEK NEAR FENCE, WIS.	LAT 45°49'53", LONG 88°23'17", IN SE 1/4 SEC.29, T.39 N., R.17 E., FLORENCE COUNTY, AT BOX CULVERT ON STATE HIGHWAY 101, 6.0 MI (9.7 KM) NORTH OF FENCE.	41.4	1958-76	05-16-76	11.17	185
04064800	LITTLE POPPLE RIVER NEAR AURORA, WIS.	LAT 45°47'34", LONG 88°11'40", IN SW 1/4 SEC.1, T.38 N., R.18 E., FLORENCE COUNTY, AT 3-BARREL CORRUGATED CULVERT ON COUNTY TRUNK HIGHWAY N., 5.5 MI (8.8 KM) WEST OF AURORA.	34.9	1970-76	05-16-76	14.12	580
04066300	COLE CREEK NEAR DUNBAR, WIS.	LAT 45°37'42", LONG 88°06'09", ON SOUTH BOUNDARY SEC.34, T.37 N., R.19 E., MARINETTE COUNTY, AT CULVERT ON U.S. HIGHWAY 8, 3.6 MI (5.8 KM) SOUTHEAST OF DUNBAR.	3.20	1960-76	05-16-76	10.40	17
04066700	MC CALL CREEK AT WAUSAUKEE, WIS.	LAT 45°21'37", LONG 87°57'16", IN NW 1/4 SEC.1, T.33 N., R.20 E., MARINETTE COUNTY, AT CULVERT ON U.S. HIGHWAY 141, 1.0 MI (1.6 KM) SOUTH OF WAUSAUKEE.	1.48	1959-76	04-02-76	11.99	33
04067500	MEMONINEE RIVER NEAR MC ALLISTER, WIS.	LAT 45°19'20", LONG 87°39'40", IN SEC.17, T.33 N., R.23 E., MARINETTE COUNTY, 300 FT (91 M) ABOVE BRIDGE ON COUNTY TRUNK HIGHWAY JJ, 2.9 MI (4.7 KM) EAST OF MC ALLISTER.	4.020	1945-61# 1962-76	04-02-76	15.60	18,000
04067760	PESHIGO RIVER NEAR CAVOUR, WIS.	LAT 45°39'20", LONG 88°38'52", IN SW 1/4 SEC.29, T.37 N., R.15 E., FOREST COUNTY, AT BRIDGE ON U.S. HIGHWAY 8, 0.7 MI (1.1 KM) NORTHWEST OF CAVOUR.	151	1970-76	04-02-76	13.48	950
04067800	ARMSTRONG CREEK NEAR ARMSTRONG CREEK, WIS.	LAT 45°39'20", LONG 88°28'44", IN W 1/2 SEC.27, T.37 N., R.16 E., FOREST COUNTY, AT BRIDGE ON U.S. HIGHWAY 8, 1.8 MI (2.9 KM) NORTHWEST OF ARMSTRONG CREEK.	23.1	1958-76	05-16-76	10.41	126
04069700	NORTH BRANCH OCONTO RIVER NEAR WABENO, WIS.	LAT 45°26'19", LONG 88°37'40", IN SW 1/4 SEC.9, T.34 N., R.15 E., FOREST COUNTY, AT PIPE ARCH CULVERT ON COUNTY TRUNK HIGHWAY C, 0.6 MI (1.0 KM) EAST OF INTERSECTION WITH STATE HIGHWAY 32 AT WABENO.	31.2	1970-76	04-02-76	11.70	118
04071700	NORTH BRANCH LITTLE RIVER NEAR COLEMAN, WIS.	LAT 45°00'37", LONG 86°02'43", ON COMMON BOUNDARY OF SECS.2 AND 3, T.29 N., R.20 E., OCONTO COUNTY, AT BRIDGE ON U.S. HIGHWAY 141, 3.8 MI (6.1 KM) SOUTH OF COLEMAN.	23.3	1958-76	03-30-76	14.12	520
*04071800	PENSAUKEE RIVER NEAR PULASKI, WIS.	LAT 44°45'48", LONG 88°15'07", IN NE 1/4 SEC.1, T.26 N., R.18 E., SHAWANO COUNTY, AT BRIDGE ON STATE HIGHWAY 32, 6.1 MI (9.8 KM) NORTH OF PULASKI.	41.8	1961-76	03-30-76	16.45	1,540

* ALSO A LOW-FLOW PARTIAL-RECORD STATION.
OPERATED AS A CONTINUOUS-RECORD GAGING STATION.
A APPROXIMATELY.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	ANNUAL MAXIMUM DISCHARGE		
					DATE	GAGE HEIGHT (FT)	DIS-CHARGE (FT ³ /S)
STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED							
*04073400	BIRD CREEK AT WAUTOMA, WIS.	LAT 44°06'00", LONG 89°18'00", IN S 1/2 SEC.34, T.19 N., R.10 E., WAUSHARA COUNTY, AT CONCRETE CULVERT ON STATE HIGHWAY 21, 0.2 MI (0.3 KM) WEST OF WAUTOMA.	3.59	1959-76	03-19-76	11.09	48
04074300	MUD CREEK NEAR NASHVILLE, WIS.	LAT 45°34'19", LONG 89°02'39", IN SW 1/4 SEC.30, T.36 N., R.12 E., FOREST COUNTY, AT CONCRETE CIRCULAR CULVERT ON U.S. HIGHWAY 8, 3.5 MI (5.6 KM) NORTH OF NASHVILLE.	10.0	1970-76	05-16-76	12.93	63
*04074700	HUNTING RIVER NEAR ELCHO, WIS.	LAT 45°25'10", LONG 89°11'15", IN N 1/2 SEC.24, T.34 N., R.12 E., LANGLADE COUNTY, AT TWIN CULVERTS ON U.S. HIGHWAY 45 AND STATE HIGHWAY 47, 1.5 MI (2.4 KM) SOUTH OF ELCHO.	A 9.00	1958-76	05-16-76	11.92	80
*04074850	LILY RIVER NEAR LILY, WIS.	LAT 45°20'59", LONG 88°49'52", IN SE 1/4 SEC.11, T.33 N., R.13 E., LANGLADE COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY A, 3.2 MI (5.1 KM) NORTH FROM JUNCTION OF STATE HIGHWAYS 55 AND 52 AT LILY.	52.4	1970-76	04-02-76	10.68	112
*04075200	EVERGREEN CREEK NEAR LANGLADE, WIS.	LAT 45°18'11", LONG 88°48'12", IN NW 1/4 SEC.18, T.31 N., R.14 E., LANGLADE COUNTY, AT CULVERT ON STATE HIGHWAY 64, 3.5 MI (5.6 KM) SOUTHWEST OF LANGLADE.	A 8.00	1959-65 1966-72# 1973-76	03-31-76	10.87	46
*04079700	SPAULDING CREEK NEAR BIG FALLS, WIS.	LAT 44°38'13", LONG 89°01'20", ON COMMON BOUNDARY OF SECS.14 AND 15, T.25 N., R.12 E., WAUPACA COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY E, 1.5 MI (2.4 KM) NORTH OF BIG FALLS.	A 4.90	1959-65 1966# 1967-76	03-31-76	10.79	48
04081010	WAUPACA RIVER TRIBUTARY NEAR WAUPACA, WIS.	LAT 44°19'34", LONG 88°59'40", IN NW 1/4 SEC.1, T.21 N., R.12 E., WAUPACA COUNTY, AT CULVERT ON U.S. HIGHWAY 10, 5.0 MI (8.0 KM) SOUTHEAST OF WAUPACA.	A 1.00	1960-76	03-12-76	13.00	60
04081900	SAWYER CREEK AT OSHKOSH, WIS.	LAT 44°02'00", LONG 88°35'00", IN SW 1/4 SEC.15, T.18 N., R.16 E., WINNEBAGO COUNTY, AT BRIDGE ON U.S. HIGHWAY 41, 1.0 MI (1.6 KM) SOUTHWEST OF BRIDGE ON ALGOMA STREET AT FOX RIVER, AT OSHKOSH.	15.3	1961-76	03-12-76	12.95	560
04083400	EAST BRANCH FOND DU LAC RIVER TRIBUTARY NEAR EDEN, WIS.	LAT 43°41'13", LONG 88°26'29", IN NE 1/4 SEC.14, T.14 N., R.17 E., FOND DU LAC COUNTY, AT CULVERT ON U.S. HIGHWAY 41, 3.0 MI (4.8 KM) WEST OF EDEN.	1.19	1961-76	1976	8	<35
*04085030	APPLE CREEK NEAR KAUKAUNA, WIS.	LAT 44°19'15", LONG 88°17'33", ON WEST BOUNDARY SEC.2, T.21 N., R.18 E., OUTAGAMIE COUNTY, AT BRIDGE ON STATE HIGHWAY 55, 3.0 MI (4.8 KM) NORTH OF KAUKAUNA.	15.0	1960-76	03-12-76	15.03	1,330
04085100	EAST RIVER TRIBUTARY AT GREENLEAF, WIS.	LAT 44°18'24", LONG 88°05'47", IN NE 1/4 SEC.8, T.21 N., R.20 E., BROWN COUNTY, AT RAILROAD BOX CULVERT, 0.5 MI (0.8 KM) SOUTH OF GREENLEAF.	8.00	1958-76	03-21-76	12.28	300
04085300	NESHOTA RIVER TRIBUTARY NEAR DENMARK, WIS.	LAT 44°23'43", LONG 87°52'13", IN NE 1/4 SEC.7, T.22 N., R.22 E., BROWN COUNTY, AT BOX CULVERT ON U.S. HIGHWAY 141, 3.8 MI (6.1 KM) NORTHWEST OF DENMARK.	3.08	1959-76	03-21-76	13.41	260
*04085400	KILLSNAKE RIVER NEAR CHILTON, WIS.	LAT 44°02'33", LONG 88°08'36", IN E 1/2 SEC.6, T.18 N., R.20 E., CALUMET COUNTY, AT BRIDGE ON COUNTRY ROAD, 2.4 MI (3.9 KM) NORTHEAST OF CHILTON.	29.5	1961-76	03-21-76	12.42	900
*04085700	SHEBOYGAN RIVER TRIBUTARY NEAR PLYMOUTH, WIS.	LAT 43°47'26", LONG 87°56'31", ON COMMON BOUNDARY OF SECS.2 AND 11, T.15 N., R.21 E., SHEBOYGAN COUNTY, AT CONCRETE CULVERT ON COUNTY TRUNK HIGHWAY J, 3.5 MI (5.6 KM) NORTHEAST OF PLYMOUTH.	5.51	1959-76	03-12-76	10.55	95

* ALSO A LOW-FLOW PARTIAL-RECORD STATION.
OPERATED AS A CONTINUOUS-RECORD GAGING STATION.
A APPROXIMATELY.
B PEAK DID NOT REACH BOTTOM OF GAGE.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	ANNUAL MAXIMUM		
					DATE	GAGE HEIGHT (FT)	DIS-CHARGE (FT ³ /S)
STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED							
04086400	MILWAUKEE RIVER TRIBUTARY NEAR FREDONIA, WIS.	LAT 43°26'28", LONG 87°55'38", IN SE 1/4 SEC.1, T.11 N., R.21 E., OZAUKEE COUNTY, AT CULVERT ON COUNTRY ROAD, 2.3 MI (3.7 KM) SOUTHEAST OF FREDONIA.	.84	1962-76	03-26-76	11.04	36
*04087050	LITTLE MEMONEE RIVER NEAR FREISTADT, WIS.	LAT 43°12'24", LONG 88°02'24", ON COMMON BOUNDARY OF SECS.29 AND 32, T.9 N., R.21 E., OZAUKEE COUNTY, AT BRIDGE ON DONGES BAY ROAD, 2.0 MI (3.2 KM) SOUTH OF FREISTADT.	7.96	1958-76	04-24-76	12.01	230
04087100	HONEY CREEK AT MILWAUKEE, WIS.	LAT 42°58'41", LONG 87°59'52", IN SE 1/4 SEC.15, T.6 N., R.21 E., MILWAUKEE COUNTY, 400 FT (122 M) UPSTREAM FROM BRIDGE ON S. 68TH STREET, 6.0 MI (9.7 KM) SOUTHWEST OF MOUTH OF MILWAUKEE RIVER, AT MILWAUKEE.	3.34	1959-76	03-04-76	19.97	350
*04087200	OAK CREEK NEAR SOUTH MILWAUKEE, WIS.	LAT 42°58'58", LONG 87°53'31", ON COMMON BOUNDARY OF SECS.21 AND 22, T.5 N., R.22 E., MILWAUKEE COUNTY, AT BRIDGE ON WEST NICHOLSON ROAD, 3.0 MI (4.8 KM) SOUTHWEST OF SOUTH MILWAUKEE.	13.9	1958-76	03-05-76	16.59	580
04087230	WEST BRANCH ROOT RIVER CANAL TRIBUTARY NEAR NORTH CAPE, WIS.	LAT 42°45'44", LONG 88°01'04", IN SE 1/4 SEC.33, T.4 N., R.21 E., RACINE COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY U, 3.0 MI (4.8 KM) SOUTHEAST OF NORTH CAPE.	3.92	1962-76	03-06-76	11.67	90
*04087250	PIKE CREEK NEAR KENOSHA, WIS.	LAT 42°36'12", LONG 87°53'41", IN W 1/2 SEC.27, T.2 N., R.22 E., KENOSHA COUNTY, AT BOX CULVERT ON STATE HIGHWAY 43, 3.0 MI (4.8 KM) NORTHWEST OF KENOSHA.	7.25	1960-76	03-05-76	17.01	180
ST. CROIX RIVER BASIN							
*05333100	LITTLE FROG CREEK NEAR MINONG, WIS.	LAT 46°05'48", LONG 91°46'39", IN NW 1/4 SEC.29, T.42 N., R.11 W., WASHBURN COUNTY, AT CULVERT ON COUNTRY ROAD, 2.5 MI (4.0 KM) EAST OF MINONG.	13.0	1961-76	03-30-76	15.38	318
05334100	SAWYER CREEK NEAR SHELL LAKE, WIS.	LAT 45°46'08", LONG 91°54'40", IN SE 1/4 SEC.13, T.38 N., R.13 W., WASHBURN COUNTY, AT BOX CULVERT ON U.S. HIGHWAY 63, 2.0 MI (3.2 KM) NORTH OF SHELL LAKE.	1.04	1960-76	03-30-76	12.21	70
*05335380	BASHAW BROOK NEAR SHELL LAKE, WIS.	LAT 45°47'02", LONG 92°07'51", IN SW 1/4 SEC.8, T.38 N., R.14 W., BURNETT COUNTY, AT TWIN BOX CULVERTS ON COUNTRY ROAD, 10.5 MI (16.9 KM) NORTHWEST OF SHELL LAKE.	24.9	1959-65 1966# 1967-76	03-30-76	12.66	105
*05340300	TRADE RIVER NEAR FREDERIC, WIS.	LAT 45°37'41", LONG 92°29'19", IN SW 1/4 SEC.4, T.36 N., R.17 W., POLK COUNTY, AT BOX CULVERT ON STATE HIGHWAYS 35 AND 48, 2.5 MI (4.0 KM) SOUTHWEST OF FREDERIC.	6.34	1958-76	03-30-76	11.48	110
05341700	WILLOW RIVER TRIBUTARY NEAR NEW RICHMOND, WIS.	LAT 45°05'23", LONG 92°28'41", IN NW 1/4 SEC.17, T.30 N., R.17 W., PIERCE COUNTY, AT TWIN BOX CULVERTS ON COUNTY TRUNK HIGHWAY 66, 3.6 MI (5.8 KM) SOUTHEAST OF NEW RICHMOND.	1.40	1959-76	03-30-76	11.19	17
05341900	KINNICKINNIC RIVER TRIBUTARY AT RIVER FALLS, WIS.	LAT 44°49'57", LONG 92°38'23", IN NE 1/4 SEC.14, T.27 N., R.19 W., PIERCE COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY FF, 1.6 MI (2.6 KM) SOUTHWEST OF RIVER FALLS.	7.26	1959-76	03-19-76	11.78	480

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ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	ANNUAL MAXIMUM DISCHARGE		
					DATE	GAGE HEIGHT (FT)	DISCHARGE (FT ³ /S)
TRIMBELLE CREEK BASIN							
*05346600	LITTLE TRIMBELLE CREEK NEAR BAY CITY, WIS.	LAT 44°38'01", LONG 92°34'05", IN S 1/2 SEC.21, T.25 N., R.18 W., PIERCE COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY K, 7.0 MI (11.3 KM) NORTHWEST OF BAY CITY.	19.9	1961-76	03-19-76	11.01	540
CHIPPEWA RIVER BASIN							
05356200	KENYON CREEK NEAR RADISSON, WIS.	LAT 45°46'02", LONG 91°06'40", IN NW 1/4 SEC.22, T.38 N., R.6 W., SAWYER COUNTY, AT BRIDGE ON STATE HIGHWAY 27, 5.0 MI (8.0 KM) EAST OF RADISSON.	A 7.50	1960-76	03-24-76	11.73	182
05357360	BEAR RIVER NEAR POWELL, WIS.	LAT 46°04'40", LONG 90°00'52", IN NE 1/4 SEC.32, T.42 N., R.4 E., IRON COUNTY, AT BRIDGE ON STATE HIGHWAY 182, 3.0 MI (4.8 KM) WEST OF POWELL.	118	1970-76	05-29-76	12.53	605
05357390	WEBER CREEK NEAR MERCER, WIS.	LAT 46°11'16", LONG 90°07'57", IN SE 1/4 SEC.21, T.43 N., R.3 E., IRON COUNTY, AT CULVERT ON U.S. HIGHWAY 51, 3.7 MI (6.0 KM) NORTHEAST OF MERCER.	5.86	1970-76	04-07-76	12.10	140
05358100	SMITH CREEK NEAR PARK FALLS, WIS.	LAT 45°57'06", LONG 90°28'07", IN NE 1/4 SEC.15, T.40 N., R.1 W., PRICE COUNTY, AT CULVERT ON STATE HIGHWAY 13, 1.5 MI (2.4 KM) NORTHWEST OF PARK FALLS.	9.11	1970-76	03-26-76	12.14	135
05359200	SOUTH FORK FLAMBEAU RIVER TRIBUTARY NEAR PARK FALLS, WIS.	LAT 45°46'35", LONG 90°20'55", IN SW 1/4 SEC.15, T.40 N., R.1 E., PRICE COUNTY, AT CULVERT ON STATE HIGHWAY 182, 5.1 MI (8.2 KM) EAST OF PARK FALLS.	.86	1960-76	03-26-76	10.90	50
*05359600	PRICE CREEK NEAR PHILLIPS, WIS.	LAT 45°43'33", LONG 90°40'12", IN SW 1/4 SEC.31, T.38 N., R.2 W., PRICE COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY W, 13.0 MI (20.9 KM) WEST OF PHILLIPS.	16.9	1958-65 1966# 1967-76	04-07-76	13.69	225
05360200	FLAMBEAU RIVER TRIBUTARY AT LADYSMITH, WIS.	LAT 45°28'54", LONG 91°06'40", IN SW 1/4 SEC.27, T.35 N., R.6 W., RUSK COUNTY, AT CULVERT ON STATE HIGHWAY 27, 1.0 MI (1.6 KM) NORTH OF LADYSMITH.	A .80	1960-76	03-24-76	11.48	20
*05361400	HAY CREEK NEAR PRENTICE, WIS.	LAT 45°32'32", LONG 90°21'37", IN SE 1/4 SEC.4, T.35 N., R.1 E., PRICE COUNTY, AT CULVERT ON U.S. HIGHWAY 8, 3.5 MI (5.6 KM) WEST OF PRENTICE.	21.9	1961-76	03-24-76	12.65	570
05361420	DOUGLAS CREEK NEAR PRENTICE, WIS.	LAT 45°31'06", LONG 90°15'28", IN NE 1/4 SEC.17, T.35 N., R.2 E., PRICE COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY C, 2.3 MI (3.7 KM) SOUTHEAST OF INTERSECTION WITH STATE HIGHWAY 13 AT PRENTICE.	24.6	1970-76	03-24-76	13.69	625
05361600	NORTH FORK JUMP RIVER NEAR PHILLIPS, WIS.	LAT 45°37'45", LONG 90°23'32", IN SW 1/4 SEC.5, T.36 N., R.1 E., PRICE COUNTY, AT CULVERT ON STATE HIGHWAY 13, 4.0 MI (6.4 KM) SOUTH OF PHILLIPS.	10.4	1970-76	11-10-75	12.13	155
*05364000	YELLOW RIVER AT CADOTT, WIS.	LAT 44°57'21", LONG 91°08'48", IN NE 1/4 SEC.31, T.29 N., R.6 W., CHIPPEWA COUNTY, AT BRIDGE ON STATE HIGHWAY 27, AT CADOTT.	351	1943-61# 1962-76	03-30-76	10.62	4,300
05364100	SETH CREEK NEAR CADOTT, WIS.	LAT 44°59'24", LONG 91°08'48", IN SW 1/4 SEC.17, T.29 N., R.6 W., CHIPPEWA COUNTY, AT CULVERT ON STATE HIGHWAY 27, 3.1 MI (5.0 KM) NORTH OF CADOTT.	3.04	1962-76	03-30-76	12.86	198
05364500	DUNCAN CREEK AT BLOOMER, WIS.	LAT 45°07'00", LONG 91°30'00", IN SEC.8, T.30 N., R.9 W., CHIPPEWA COUNTY, 0.2 MI (0.3 KM) BELOW BLOOMER DAM, AT BLOOMER.	49.2	1945-51# 1958-76	03-30-76	5.12	440

* ALSO A LOW-FLOW PARTIAL-RECORD STATION.
OPERATED AS A CONTINUOUS-RECORD GAGING STATION.
A APPROXIMATELY.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	ANNUAL MAXIMUM		
					DATE	GAGE HEIGHT (FT)	DIS-CHARGE (FT ³ /S)
CHIPPEWA RIVER BASIN--CONTINUED							
*05365700	GOGGLE-EYE CREEK NEAR THORP, WIS.	LAT 44°58'40", LONG 90°48'00", ON WEST BOUNDARY SEC.19, T.29 N., R.3 W., CLARK COUNTY, AT CULVERT ON STATE HIGHWAY 73, 1.3 MI (2.1 KM) NORTH OF THORP.	6.70	1958-76	03-30-76	12.65	250
*05366500	EAU CLAIRE RIVER NEAR FALL CREEK, WIS.	LAT 44°48'35", LONG 91°16'50", IN NW 1/4 SEC.19, T.27 N., R.7 W., EAU CLAIRE COUNTY, 500 FT (152 M) EAST OF COUNTY TRUNK HIGHWAY K, 3.2 MI (5.1 KM) NORTH OF FALL CREEK.	758	1943-55# 1958-76	03-30-76	10.89	8,000
05367030	WILLOW CREEK NEAR EAU CLAIRE, WIS.	LAT 44°44'11", LONG 91°26'48", ON COMMON BOUNDARY OF SECS.14 AND 15, T.26 N., R.9 W., EAU CLAIRE COUNTY, AT BOX CULVERT ON STATE HIGHWAY 93, 4.0 MI (6.4 KM) SOUTH OF EAU CLAIRE.	4.38	1958-76	03-20-76	10.91	108
*05367480	EAST BRANCH PINE CREEK TRIBUTARY NEAR DALLAS, WIS.	LAT 45°16'50", LONG 91°48'30", IN SW 1/4 SEC.1, T.32 N., R.12 W., BARRON COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY O, 1.5 MI (2.4 KM) NORTH OF DALLAS.	3.85	1960-76	03-21-76	12.64	148
05367500	REO CEDAR RIVER NEAR COLFAX, WIS.	LAT 45°03'50", LONG 91°42'45", IN SW 1/4 SEC.22, T.30 N., R.11 W., DUNN COUNTY, 3.2 MI (5.1 KM) BELOW TROUT CREEK, 4.7 MI (7.6 KM) NORTH OF COLFAX.	1,100	1914-61# 1962-76	03-30-76	5.95	6,800
05367700	LIGHTNING CREEK AT ALMENA, WIS.	LAT 45°25'17", LONG 92°01'57", IN NW 1/4 SEC.19, T.34 N., R.13 W., BARRON COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY P, AT ALMENA.	19.8	1958-76	03-12-76	11.08	475
05369600	EAU GALLE RIVER TRIBUTARY NEAR HERSEY, WIS.	LAT 44°56'04", LONG 92°14'10", IN SW 1/4 SEC.5, T.28 N., R.15 W., ST. CROIX COUNTY, AT BOX CULVERT ON INTERSTATE HIGHWAY 94, 2.0 MI (3.2 KM) SOUTHWEST OF HERSEY.	.65	1960-76	03-12-76	10.59	55
05370600	ARKANSAW CREEK TRIBUTARY NEAR ARKANSAW, WIS.	LAT 44°38'31", LONG 92°03'09", IN SW 1/4 SEC.14, T.25 N., R.14 W., PEPIN COUNTY, AT BOX CULVERT ON U.S. HIGHWAY 10, 1.2 MI (1.9 KM) NORTHWEST OF ARKANSAW.	2.56	1959-76	03-12-76	13.45	335
*05370900	SPRING CREEK NEAR DURAND, WIS.	LAT 44°34'13", LONG 91°57'48", IN S 1/2 SEC.9, T.24 N., R.13 W., BUFFALO COUNTY, AT BRIDGE ON COUNTRY ROAD, 4.0 MI (6.4 KM) SOUTH OF BRIDGE ON CHIPPEWA RIVER AT DURAND.	6.49	1962-76	03-12-76	11.38	60
BY GOLLY CREEK BASIN							
05371300	BY GOLLY CREEK NEAR NELSON, WIS.	LAT 44°26'21", LONG 91°57'48", IN SW 1/4 SEC.28, T.23 N., R.13 W., BUFFALO COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY D, 3.0 MI (4.8 KM) NORTHEAST OF NELSON.	.28	1962-76	1976	C	f
BUFFALO RIVER BASIN							
05371800	BUFFALO RIVER TRIBUTARY NEAR OSSEO, WIS.	LAT 44°35'01", LONG 91°05'40", IN S 1/2 SEC.3, T.24 N., R.6 W., JACKSON COUNTY, AT CULVERT ON U.S. HIGHWAY 10, 6.5 MI (10.5 KM) EAST OF OSSEO.	1.44	1960-76	03-12-76	11.10	56
05371920	BUFFALO RIVER NEAR MONDOVI, WIS.	LAT 44°31'36", LONG 91°41'46", IN SW 1/4 SE 1/4 SEC.27, T.24 N., R.11 W., BUFFALO COUNTY, AT BRIDGE ON STATE HIGHWAY 88, 4.0 MI (6.4 KM) SOUTH OF MONDOVI.	280	1974-76	03-12-76	12.56	1,150
WAUMANDEE CREEK BASIN							
*05372000	EAGLE CREEK NEAR FOUNTAIN CITY, WIS.	LAT 44°09'49", LONG 91°42'28", IN SW 1/4 SEC.33, T.20 N., R.11 W., BUFFALO COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY 8, 2.5 MI (4.0 KM) NORTH OF FOUNTAIN CITY.	26.8	1961-76	11-10-75	12.35	490

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/ DISCHARGE NOT DETERMINED.
A APPROXIMATELY.
C GAGE NOT OPERATING.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	ANNUAL MAXIMUM		
					DATE	GAGE HEIGHT (FT)	DISCHARGE (FT ³ /S)
BLACK RIVER BASIN							
05380800	BLACK RIVER TRIBUTARY NEAR WHITTLESEY, WIS.	LAT 45°12'34", LONG 90°19'05", IN SW 1/4 SEC.35, T.32 N., R.1 E., TAYLOR COUNTY, AT BRIDGE ON STATE HIGHWAY 13, 1.1 MI (1.8 KM) SOUTH OF WHITTLESEY.	2.12	1960-76	03-30-76	11.89	170
*05380900	POPLAR RIVER NEAR OWEN, WIS.	LAT 44°53'10", LONG 90°34'17", IN NW 1/4 SEC.25, T.28 N., R.2 W., CLARK COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY N, 4.2 MI (6.8 KM) SOUTH OF OWEN.	157	1958-65 1966# 1967-76	03-20-76	14.96	3,700
*05380970	CAWLEY CREEK NEAR NEILLSVILLE, WIS.	LAT 44°36'42", LONG 90°34'31", IN SW 1/4 SEC.25, T.25 N., R.2 W., CLARK COUNTY, AT BRIDGE ON STATE HIGHWAY 73, 3.7 MI (6.0 KM) NORTH OF NEILLSVILLE.	38.6	1961-76	03-21-76	15.49	1,760
*05382200	FRENCH CREEK NEAR EYTRICK, WIS.	LAT 44°11'04", LONG 91°18'49", IN NE 1/4 SEC.27, T.20 N., R.8 W., TREMPLEAU COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAYS O AND T, 2.5 MI (4.0 KM) WEST OF EYTRICK.	14.3	1960-76	03-12-76	10.02	205
LA CROSSE RIVER BASIN							
05382300	BEAVER CREEK TRIBUTARY NEAR SPARTA, WIS.	LAT 43°57'58", LONG 90°49'33", IN NW 1/4 SEC.11, T.17 N., R.4 W., MONROE COUNTY, AT BOX CULVERT ON STATE HIGHWAYS 27 AND 71, 1.9 MI (3.1 KM) NORTH OF SPARTA.	1.72	1959-76	03-12-76	11.76	108
*05382500	LITTLE LA CROSSE RIVER NEAR LEON, WIS.	LAT 43°53'45", LONG 90°50'25", IN NE 1/4 SEC.3, T.16 N., R.4 W., MONROE COUNTY, 4.0 MI (6.4 KM) UPSTREAM FROM MOUTH, 1.5 MI (2.4 KM) NORTHWEST OF LEON.	77.1	1934-61# 1962-76	03-12-76	6.20	1,040
MORMON CREEK BASIN							
*05386300	MORMON CREEK NEAR LA CROSSE, WIS.	LAT 43°46'00", LONG 91°08'27", IN NE 1/4 SEC.19, T.15 N., R.6 W., LA CROSSE COUNTY, AT BRIDGE ON COUNTRY ROAD, 6.0 MI (9.7 KM) SOUTHEAST OF LA CROSSE.	25.5	1961-76	03-12-76	13.02	1,300
BAO AXE RIVER BASIN							
*05387100	NORTH FORK BAO AXE RIVER NEAR GENOA, WIS.	LAT 43°33'10", LONG 91°08'58", IN SW 1/4 SEC.36, T.13 N., R.7 W., VERNON COUNTY, AT BRIDGE ON STATE HIGHWAY 56, 4.1 MI (6.6 KM) SOUTHEAST OF GENOA.	80.9	1959-65 1966# 1967-76	03-12-76	14.98	1,500
DU CHARME CREEK BASIN							
05388460	DU CHARME CREEK AT EASTMAN, WIS.	LAT 43°10'32", LONG 91°01'53", IN NE 1/4 SEC.13, T.8 N., R.6 W., CRAWFORD COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY D, AT EASTMAN.	.30	1961-76	1976	B	<30
WISCONSIN RIVER BASIN							
*05390140	MUSKRAT CREEK AT CONOVER, WIS.	LAT 46°03'27", LONG 89°15'24", IN SW 1/4 SEC.4, T.41 N., R.10 E., VILAS COUNTY, AT CORRUGATED CULVERT ON U.S. HIGHWAY 45, 0.1 MI (0.2 KM) NORTH OF CONOVER.	10.2	1970-76	05-16-76	11.82	61
05290240	FOURMILE CREEK NEAR THREE LAKES, WIS.	LAT 45°50'17", LONG 89°04'32", IN NE 1/4 SEC.26, T.39 N., R.11 E., ONEIDA COUNTY, AT 2-BARREL CORRUGATED CULVERT ON FOURMILE CREEK ROAD, 5.5 MI (8.9 KM) NORTHEAST OF THREE LAKES.	10.3	1970-76	04-19-76	12.40	70

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B PEAK DID NOT REACH BOTTOM OF THE GAGE.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	ANNUAL MAXIMUM		
					DATE	GAGE HEIGHT (FT)	DIS- CHARGE (FT ³ /S)
WISCONSIN RIVER BASIN--CONTINUED							
05391260	GUDEGAST CREEK NEAR STARKS, WIS.	LAT 45°41'41", LONG 89°15'42", IN NW 1/4 SEC.16, T.37 N., R.10 E., ONEIDA COUNTY, AT CORRUGATED CULVERT ON COUNTRY ROAD, 3.0 MI (4.8 KM) NORTHWEST OF STARKS.	14.0	1970-76	03-10-76	11.63	54
05391950	SQUAW CREEK NEAR HARRISON, WIS.	LAT 45°32'47", LONG 89°29'16", IN SW 1/4 SEC.3, T.35 N., R.8 E., LINCOLN COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY A, 5.0 MI (8.0 KM) NORTHEAST OF HARRISON.	3.23	1970-76	05-16-76	10.59	17
*05392150	MISHONAGON CREEK NEAR WOODRUFF, WIS.	LAT 45°54'41", LONG 89°45'30", IN NE 1/4 SEC.32, T.40 N., R.6 E., VILAS COUNTY, AT TWIN CULVERTS ON STATE HIGHWAY 47, 3.0 MI (4.8 KM) NORTHWEST OF WOODRUFF.	17.6	1958-76	03-30-76	10.40	70
*05392350	BEARSKIN CREEK NEAR HARSHAW, WIS.	LAT 45°38'43", LONG 89°41'12", IN SW 1/4 SEC.36, T.37 N., R.6 E., ONEIDA COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY K, 2.1 MI (3.4 KM) SOUTHWEST OF HARSHAW.	31.1	1958-65 1966# 1967-76	03-20-76	9.63	77
05393620	SKANAWAN CREEK NEAR TOMAHAWK, WIS.	LAT 45°26'39", LONG 89°41'35", IN SW 1/4 SEC.13, T.34 N., R.6 E., LINCOLN COUNTY, AT CULVERT ON STATE HIGHWAY 107, 3.5 MI (5.6 KM) SOUTHEAST OF TOMAHAWK.	6.69	1970-76	03-30-76	11.03	69
05393640	LITTLE PINE CREEK NEAR IRMA, WIS.	LAT 45°23'37", LONG 89°40'20", IN NW 1/4 SEC.31, T.34 N., R.7 E., LINCOLN COUNTY, AT BOX CULVERT ON U.S. HIGHWAY 51, 3.0 MI (4.8 KM) NORTH OF IRMA.	22.0	1970-76	03-30-76	12.99	140
*05394000	NEW WOOD RIVER NEAR MERRILL, WIS.	LAT 45°15'30", LONG 89°50'40", IN E 1/2 SEC.15, T.32 N., R.5 E., LINCOLN COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY E, 9.5 MI (15.3 KM) NORTHWEST OF MERRILL.	A 82.2	1953-61# 1962-76	03-30-76	7.24	2,460
*05394200	DEVIL CREEK NEAR MERRILL, WIS.	LAT 45°08'56", LONG 89°47'13", IN N 1/2 SEC.30, T.31 N., R.6 E., LINCOLN COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY F, 5.8 MI (9.3 KM) SOUTHWEST OF MERRILL.	9.58	1961-76	03-30-76	14.50	500
05395020	LLOYD CREEK NEAR DOERING, WIS.	LAT 45°13'57", LONG 89°22'04", IN SE 1/4 SEC.21, T.32 N., R.9 E., LANGLADE COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY C, 4.5 MI (7.2 KM) EAST OF DOERING.	7.80	1970-76	03-30-76	13.26	318
05395100	TRAPPE RIVER TRIBUTARY NEAR MERRILL, WIS.	LAT 45°08'07", LONG 89°30'08", IN SW 1/4 SEC.28, T.31 N., R.8 E., LINCOLN COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY P, 9.5 MI (15.3 KM) SOUTHEAST OF MERRILL.	A 1.58	1959-76	05-16-76	12.27	102
05396100	PET BROOK TRIBUTARY NEAR EDGAR, WIS.	LAT 44°56'40", LONG 89°57'05", IN SE 1/4 SEC.31, T.29 N., R.5 E., MARATHON COUNTY, AT CULVERT ON STATE HIGHWAY 29, 1.5 MI (2.4 KM) NORTHEAST OF EDGAR.	6.86	1962-76	03-30-76	14.55	580
05397600	BIG SANDY CREEK NEAR WAUSAU, WIS.	LAT 45°03'55", LONG 89°27'00", IN SE 1/4 SEC.31, T.30 N., R.9 E., MARATHON COUNTY, AT BRIDGE ON STATE HIGHWAY 52, 10.0 MI (16.1 KM) NORTHEAST OF WAUSAU.	A 11.5	1959-76	03-26-76	12.40	470
05399200	RANDALL CREEK TRIBUTARY NEAR ABBOTSFORD, WIS.	LAT 44°56'50", LONG 90°11'45", ON SOUTH BOUNDARY OF SEC.36, T.29 N., R.2 E., MARATHON COUNTY, AT CONCRETE CULVERT ON STATE HIGHWAY 29, 5.8 MI (9.3 KM) EAST OF ABBOTSFORD.	.56	1959-76	03-30-76	12.27	155
05400025	JOHNSON CREEK NEAR KNOWLTON, WIS.	LAT 44°44'19", LONG 89°36'39", IN SE 1/4 NE 1/4 SEC.13, T.26 N., R.7 E., MARATHON COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY X, 2.7 MI (4.3 KM) EAST OF KNOWLTON.	25.1	1973-76	03-25-76	18.92	5,700

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A APPROXIMATELY.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	ANNUAL MAXIMUM	
					DATE	GAGE HEIGHT (FT)	DISCHARGE (FT^{3}/S)
WISCONSIN RIVER BASIN--CONTINUED						
05401800	YELLOW RIVER TRIBUTARY NEAR PITTSVILLE, WIS.	LAT 44°28'58", LONG 90°07'05", ON COMMON BOUNDARY OF SECS.11 AND 14, T.23 N., R.3 E., WOOD COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY C, 2.0 MI (3.2 KM) NORTH OF PITTSVILLE.	7.23	1959-76	03-30-76	13.32 670
*05403520	WEBSTER CREEK AT NEW LISBON, WIS.	LAT 43°51'23", LONG 90°10'25", IN NE 1/4 SEC.19, T.16 N., R.3 E., JUNEAU COUNTY, AT BRIDGE ON STATE HIGHWAY 80, 1.2 MI (1.9 KM) SOUTH OF NEW LISBON.	11.8	1961-76	05-16-76	12.09 65
*05403550	ONEMILE CREEK NEAR MAUSTON, WIS.	LAT 43°45'50", LONG 90°04'45", IN SE 1/4 SEC.24, T.15 N., R.3 E., JUNEAU COUNTY, AT BRIDGE ON STATE HIGHWAY 58, 2.4 MI (3.9 KM) SOUTH OF MAUSTON.	30.2	1958-76	03-12-76	12.68 205
05403610	WISCONSIN RIVER TRIBUTARY AT WISCONSIN DELLS, WIS.	LAT 43°38'22", LONG 89°45'45", IN NE 1/4 SEC.3, T.13 N., R.6 E., COLUMBIA COUNTY, AT CULVERT ON STATE HIGHWAY 13, 0.8 MI (1.3 KM) NORTH OF WISCONSIN DELLS.	1.39	1962-76	1976	8 410
*05404200	NARROWS CREEK AT LOGANVILLE, WIS.	LAT 43°26'32", LONG 90°02'06", IN SE 1/4 SEC.8, T.11 N., R.4 E., SAUK COUNTY, AT BRIDGE ON STATE HIGHWAYS 23 AND 154, 0.2 MI (0.3 KM) NORTH OF LOGANVILLE.	40.1	1958-65 1966# 1967-76	03-19-76	15.00 2,650
*05405600	ROWAN CREEK AT POYNETTE, WIS.	LAT 43°23'13", LONG 89°23'25", IN S 1/2 SEC.35, T.11 N., R.9 E., COLUMBIA COUNTY, AT BRIDGE ON U.S. HIGHWAY 51, AT POYNETTE.	10.4	1961-76	03-19-76	15.16 820
05406800	ROCKY BRANCH NEAR RICHLAND CENTER, WIS.	LAT 43°18'52", LONG 90°23'22", IN E 1/2 SEC.29, T.10 N., R.1 E., RICHLAND COUNTY, AT CULVERT ON STATE HIGHWAY 80, 1.5 MI (2.4 KM) SOUTH OF RICHLAND CENTER.	1.68	1960-76	03-12-76	11.26 55
*05407100	RICHLAND CREEK NEAR PLUGTOWN, WIS.	LAT 43°11'12", LONG 90°44'23", IN NW 1/4 SEC.9, T.8 N., R.3 W., CRAWFORD COUNTY, AT BRIDGE ON U.S. HIGHWAY 61, 2.0 MI (3.2 KM) SOUTH OF PLUGTOWN.	19.2	1958-76	03-12-76	12.26 240
*05407200	CROOKED CREEK NEAR BOSCOBEL, WIS.	LAT 43°06'27", LONG 90°42'18", IN SE 1/4 SEC.2, T.7 N., R.3 W., GRANT COUNTY, AT BRIDGE ON U.S. HIGHWAY 61, 1.6 MI (2.6 KM) SOUTH OF BOSCOBEL.	12.9	1959-76	03-12-76	12.30 520
*05407400	MORRIS CREEK TRIBUTARY NEAR NORWALK, WIS.	LAT 43°51'10", LONG 90°37'32", IN NW 1/4 SEC.21, T.16 N., R.2 W., MONROE COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY T, 2.0 MI (3.2 KM) NORTH OF NORWALK.	4.59	1960-76	1976	C f
GRANT RIVER BASIN						
*05413400	PIGEON CREEK NEAR LANCASTER, WIS.	LAT 42°49'00", LONG 90°43'20", IN SW 1/4 SEC.15, T.4 N., R.3 W., GRANT COUNTY, AT CULVERT ON COUNTRY ROAD, 2.0 MI (3.2 KM) SOUTH OF LANCASTER.	6.93	1960-65 1966# 1967-76	03-12-76	13.40 560
PLATTE RIVER BASIN						
*05414200	BEAR BRANCH NEAR PLATTEVILLE, WIS.	LAT 42°45'46", LONG 90°30'06", IN NW 1/4 SEC.4, T.3 N., R.1 W., GRANT COUNTY, AT BOX CULVERT ON STATE HIGHWAY B1, 2.3 MI (3.7 KM) NORTHWEST OF PLATTEVILLE.	2.80	1958-76	03-12-76	13.00 320

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 # OPERATED AS A CONTINUOUS-RECORD GAGING STATION.
 f DISCHARGE NOT DETERMINED.
 B PEAK DID NOT REACH BOTTOM OF THE GAGE.
 C GAGE NOT OPERATING.

DISCHARGE AT PARTIAL-RECORD STATIDNS AND MISCELLANEOUS SITES

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	ANNUAL MAXIMUM		
					DATE	GAGE HEIGHT (FT)	DIS-CHARGE (FT ³ /S)
GALENA RIVER BASIN							
*05414900	PATS CREEK NEAR ELK GROVE, WIS.	LAT 42°48'03", LONG 90°22'40", IN SW 1/4 SEC.4, T.2 N., R.1 E., LAFAYETTE COUNTY, AT BRIDGE ON STATE HIGHWAY 81, 7.0 MI (11.3 KM) SOUTHEAST OF PLATTEVILLE.	8.49	1960-76	03-12-76	13.19	560
ROCK RIVER BASIN							
05423000	WEST BRANCH ROCK RIVER NEAR WAUPUN, WIS.	LAT 43°40'05", LONG 88°39'10", IN SW 1/4 SEC.24, T.14 N., R.15 E., FOND DU LAC COUNTY, ON RIGHT BANK, 700 FT (213 M) DOWNSTREAM FROM BRIDGE ON U.S. HIGHWAY 151, 4.5 MI (7.2 KM) NORTHEAST OF WAUPUN.	41.4	1949-70#	03-27-76	5.19	520
*05423300	SOUTH BRANCH ROCK RIVER TRIBUTARY NEAR WAUPUN, WIS.	LAT 43°39'46", LONG 88°48'55", IN S 1/2 SEC.22, T.14 N., R.14 E., FOND DU LAC COUNTY, AT CONCRETE CULVERT ON COUNTRY ROAD, 4.5 MI (7.2 KM) NORTHWEST OF WAUPUN.	11.9	1959-76	03-04-76	11.29	210
*05423800	EAST BRANCH ROCK RIVER TRIBUTARY NEAR SLINGER, WIS.	LAT 43°23'06", LONG 88°18'29", IN S 1/2 SEC.26, T.11 N., R.18 E., WASHINGTON COUNTY, AT CULVERT ON U.S. HIGHWAY 41, 4.0 MI (6.4 KM) NORTHWEST OF SLINGER.	3.04	1960-76	03-12-76	11.42	120
05424300	ROCK RIVER TRIBUTARY NEAR WATERTOWN, WIS.	LAT 43°09'51", LONG 88°38'44", IN NE 1/4 SEC.18, T.8 N., R.16 E., JEFFERSON COUNTY, AT CONCRETE CULVERT ON OLD U.S. HIGHWAY 16, 5.0 MI (8.0 KM) EAST OF WATERTOWN.	4.58	1959-76	03-04-76	13.42	185
*05425700	ROBBINS CREEK AT COLUMBUS, WIS.	LAT 43°20'48", LONG 89°01'55", IN SE 1/4 SEC.11, T.10 N., R.12 E., COLUMBIA COUNTY, AT CULVERT ON U.S. HIGHWAY 16, AT COLUMBUS.	8.54	1960-76	1976	C	f
05425827	MAUNESHA RIVER NEAR SUN PRAIRIE, WIS.	LAT 43°13'37", LONG 89°09'33", IN SE 1/4 SEC.23, T.9 N., R.11 E., DANE COUNTY, AT BRIDGE ON TOWN ROAD, 4.2 MI (6.8 KM) NORTHEAST OF SUN PRAIRIE.	26.2	1973-76	03-12-76	12.44	485
05426100	SCUPPERNONG CREEK NEAR WALES, WIS.	LAT 43°00'58", LONG 88°24'29", IN NE 1/4 SEC.6, T.6 N., R.18 E., WAUKESHA COUNTY, AT CULVERT ON U.S. HIGHWAY 18, 1.8 MI (2.9 KM) NORTHWEST OF WALES.	8.28	1962-76	03-12-76	10.30	95
*05427200	ALLEN CREEK NEAR FORT ATKINSON, WIS.	LAT 42°53'54", LONG 88°51'35", IN NE 1/4 SEC.17, T.5 N., R.14 E., JEFFERSON COUNTY, AT BOX CULVERT ON STATE HIGHWAY 26, 2.5 MI (4.0 KM) SOUTHWEST OF FORT ATKINSON.	10.2	1958-76	03-04-76	10.30	88
*05427800	TOKEN CREEK NEAR MADISON, WIS.	LAT 43°10'52", LONG 89°19'28", IN SW 1/4 SEC.4, T.8 N., R.10 E., DANE COUNTY, AT CULVERT ON U.S. HIGHWAY 51, 8.0 MI (12.9 KM) NORTHEAST OF STATE CAPITOL AT MADISON.	24.2	1961-65	03-12-76	14.16	576
					1966#		
					1967-76		
*05431400	LITTLE TURTLE CREEK AT ALLENS GROVE, WIS.	LAT 42°34'46", LONG 88°45'33", IN NE 1/4 SEC.6, T.1 N., R.15 E., WALWORTH COUNTY, AT BRIDGE ON COUNTRY ROAD, 0.2 MI (0.3 KM) SOUTH OF ALLENS GROVE.	41.8	1962-76	03-12-76	13.43	800
*05432300	ROCK BRANCH NEAR MINERAL POINT, WIS.	LAT 42°50'02", LONG 90°09'15", IN SE 1/4 SEC.8, T.4 N., R.3 E., IOWA COUNTY, AT BOX CULVERT ON STATE HIGHWAY 23, 2.5 MI (4.0 KM) SOUTH OF MINERAL POINT.	4.83	1959-76	03-12-76	12.28	290
*05433500	YELLOWSTONE RIVER NEAR BLANCHARDVILLE, WIS.	LAT 42°46'55", LONG 89°59'50", IN NE 1/4 SEC.34, T.4 N., R.4 E., LAFAYETTE COUNTY, 0.6 MI (1.0 KM) UPSTREAM FROM BRIDGE ON COUNTY TRUNK HIGHWAY F, 7.0 MI (11.3 KM) WEST-SOUTHWEST OF BLANCHARDVILLE.	28.5	1954-65#	03-12-76	9.18	1,590
					1966-76		

* ALSO A LOW-FLOW PARTIAL-RECORD STATION,
 # OPERATED AS A CONTINUOUS-RECORD GAGING STATION.
 f DISCHARGE NOT DETERMINED.
 C GAGE NOT OPERATING.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	ANNUAL MAXIMUM		
					DATE	GAGE HEIGHT (FT)	DIS-CHARGE (FT ³ /S)
ROCK RIVER BASIN--CONTINUED							
05434200	SKINNER CREEK TRIBUTARY NEAR MONROE, WIS.	LAT 42°38'25", LONG 89°37'52", IN S 1/2 SEC.14, T.2 N., R.7 E., GREEN COUNTY, AT CULVERT ON STATE HIGHWAY 69, 2.4 MI (3.9 KM) NORTH OF MONROE.	.46	1959-76	05-17-76	12.62	62
05435900	SUGAR RIVER TRIBUTARY NEAR PINE BLUFF, WIS.	LAT 43°02'48", LONG 89°36'42", IN SE 1/4 SEC.27, T.7 N., R.7 E., DANE COUNTY, AT CULVERT ON COUNTY TRUNK HIGHWAY J, 1.1 MI (1.8 KM) SOUTHEAST OF PINE BLUFF.	7.46	1961-76	03-12-76	13.56	255
*05436200	GILL CREEK NEAR BROOKLYN, WIS.	LAT 42°49'38", LONG 89°26'43", IN NW 1/4 SEC.16, T.4 N., R.9 E., GREEN COUNTY, AT CULVERT ON STATE HIGHWAY 92, 4.3 MI (6.9 KM) WEST OF BROOKLYN.	3.34	1961-76	05-17-76	12.42	67
*05437200	EAST FORK RACCOON CREEK TRIBUTARY NEAR BELOIT, WIS.	LAT 42°30'44", LONG 89°06'40", ON COMMON BOUNDARY OF SECS.30 AND 31, T.1 N., R.12 E., ROCK COUNTY, AT CULVERT ON STATE HIGHWAY 61, 2.9 MI (4.7 KM) WEST OF BELOIT.	4.67	1956-76	03-12-76	12.26	155
ILLINOIS RIVER BASIN							
05544300	MUKWONAGO RIVER TRIBUTARY NEAR MUKWONAGO, WIS.	LAT 42°58'58", LONG 88°19'02", IN S 1/2 SEC.36, T.5 N., R.18 E., WAUKESHA COUNTY, AT CULVERT ON STATE HIGHWAY 83, 1.5 MI (2.4 KM) SOUTHEAST OF MUKWONAGO.	1.32	1960-71 1973-76	03-06-76	11.39	56
05545100	SUGAR CREEK AT ELKHORN, WIS.	LAT 42°41'05", LONG 88°30'50", IN SW 1/4 SEC.29, T.3 N., R.17 E., WALWORTH COUNTY, AT CULVERT ON STATE HIGHWAY 11, 2.0 MI (3.2 KM) NORTHEAST OF ELKHORN.	6.66	1962-76	03-06-76	12.70	190
05545200	WHITE RIVER TRIBUTARY NEAR BURLINGTON, WIS.	LAT 42°41'03", LONG 88°21'37", ON COMMON BOUNDARY OF SECS.27 AND 34, T.3 N., R.18 E., WALWORTH COUNTY, AT BOX CULVERT ON STATE HIGHWAY 11, 4.5 MI (7.2 KM) WEST OF BURLINGTON.	2.42	1956-76	08-14-76	11.13	65
*05548150	NORTH BRANCH NIPPERSINK CREEK TRIBUTARY NEAR GENOA CITY, WIS.	LAT 42°30'15", LONG 88°23'01", IN E 1/2 SEC.32, T.1 N., R.18 E., WALWORTH COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY B, 3.0 MI (4.8 KM) WEST OF GENOA CITY.	13.8	1962-76	03-03-76	11.66	202

* ALSO A LOW-FLOW PARTIAL-RECORD STATION.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

MEASUREMENTS AT MISCELLANEOUS SITES

MEASUREMENTS OF STREAMFLOW AT POINTS OTHER THAN GAGING STATIONS OR PARTIAL-RECORD STATIONS ARE GIVEN IN THE FOLLOWING TABLE.

STREAM	TRIBUTARY TO	LOCATION	DRAINAGE AREA (MI ²)	YEAR MEASURED PREVIOUSLY (WATER YEARS)	MEASUREMENTS	
					DATE	DISCHARGE (FT ³ /S)
STREAMS TRIBUTARY TO LAKE MICHIGAN						
PIKE RIVER	MENOMINEE RIVER	LAT 45°29'50", LONG 87°59'37", IN SW 1/4 SEC.15, T.35 N., R.20 E., MARINETTE COUNTY, 0.1 MI (0.2 KM) UPSTREAM FROM CHICAGO, MILWAUKEE, ST. PAUL, AND PACIFIC RAILROAD BRIDGE, 0.2 MI (0.3 KM) SOUTH OF AMBERG, AND 1.2 MI (1.9 KM) DOWNSTREAM FROM CONFLUENCE OF NORTH AND SOUTH BRANCHES.	253	1914-70#	08-31-76	*92.9
GRAND RIVER	FOX RIVER	LAT 43°41'09", LONG 89°05'09", IN SW 1/4 SEC.16, T.14 N., R.12 E., GREEN LAKE COUNTY, AT TOWN ROAD BRIDGE, 2.2 MI (3.5 KM) EAST OF KINGSTON.	73.7	1968-75#	06-24-76	*16.8
MECAN RIVER	FOX RIVER	SE 1/4 SE 1/4 SEC.27, T.17 N., R.10 E., MARQUETTE COUNTY, AT GERMANIA WILDLIFE PRESERVE.	--	--	09-08-76	*79.7
LITTLE WOLF RIVER	WOLF RIVER	LAT 44°41'27", LONG 89°15'51", IN SW 1/4 NW 1/4 SEC.26, T.26 N., R.12 E., MARATHON COUNTY, ON SCHULIST ROAD, FIRST DIRT ROAD SOUTH OF COUNTY ROAD VV SOUTH OF GALLOWAY.	--	--	07-14-76	7.25
HOLT CREEK	LITTLE WOLF RIVER	SE 1/4 SEC.27, T.26 N., R.10 E., MARATHON COUNTY, 1.0 MI (1.6 KM) SOUTHEAST OF GALLOWAY.	--	--	07-14-76	2.01
HOLT CREEK	LITTLE WOLF RIVER	SE 1/4 SEC.34, T.26 N., R.10 E., MARATHON COUNTY, AT STATE HIGHWAY 49 BRIDGE SOUTH OF GALLOWAY.	--	--	07-14-76	2.04
LITTLE WOLF RIVER	WOLF RIVER	SW 1/4 SW 1/4 SEC.35, T.26 N., R.10 E., AT MARATHON-PORTAGE COUNTY LINE.	51.8	--	07-14-76	8.06
COMET CREEK	LITTLE WOLF RIVER	SE 1/4 NE 1/4 SEC.12, T.26 N., R.10 E., MARATHON COUNTY, 2.5 MI (4.0 KM) SOUTH OF ELDERON.	--	--	07-14-76	4.13
LITTLE WOLF RIVER	WOLF RIVER	LAT 44°24'47", LONG 88°51'55", IN SE 1/4 NE 1/4 SEC.1, T.22 N., R.13 E., WAUPACA COUNTY, AT HIGHWAY BRIDGE IN ROYALTON.	514	1914-70#	07-07-76	*137
WAUPACA RIVER	WOLF RIVER	LAT 44°19'50", LONG 88°59'45", IN NW 1/4 NW 1/4 SEC.1, T.21 N., R.12 E., WAUPACA COUNTY, AT BRIDGE ON TOWN ROAD, 4.0 MI (6.4 KM) UPSTREAM FROM WEYAUMEGA LAKE DAM, 4.5 MI (7.2 KM) SOUTHEAST OF WAUPACA, AND ABOUT 5.8 MI (8.0 KM) DOWNSTREAM FROM CRYSTAL RIVER.	272	1916-66#	07-07-76	*151
CHIPPEWA RIVER BASIN						
EAU CLAIRE RIVER	CHIPPEWA RIVER	NW 1/4 NE 1/4 SEC.20, T.27 N., R.9 W., EAU CLAIRE COUNTY, AT DEWEY STREET, 0.3 MI (0.5 KM) UPSTREAM FROM MOUTH, AT EAU CLAIRE.	--	1975	03-24-76	2,420
LA CROSSE RIVER BASIN						
LA CROSSE RIVER	MISSISSIPPI RIVER	LAT 43°54'05", LONG 91°07'08", IN SW 1/4 SE 1/4 SEC.32, T.17 N., R.6 W., LA CROSSE COUNTY, ON TOWN ROAD, 1.9 MI (3.0 KM) WEST OF WEST SALEM.	398	1914-70#	08-18-76 09-02-76	*203 *182

* BASE FLOW.

OPERATED AS A CONTINUOUS-RECORD GAGING STATION.

STREAM	TRIBUTARY TO	LOCATION	DRAINAGE AREA (MI ²)	DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1976	MEASUREMENTS DATE	DISCHARGE (FT ³ /S)
				MEASURED PREVIOUSLY (WATER YEARS)		
COON CREEK BASIN						
COON CREEK	MISSISSIPPI RIVER	LAT 43°42'15", LONG 91°01'05", IN NE 1/4 NE 1/4 SEC.25, T.14 N., R.7 W., VERNON COUNTY, 0.5 MI (0.8 KM) UPSTREAM FROM WING HOLLOW CREEK AT COON VALLEY.	77.2	1934-40#	08-17-76	*46.6
WISCONSIN RIVER BASIN						
WISCONSIN RIVER	MISSISSIPPI RIVER	LAT 46°02'52", LONG 89°15'57", IN SE 1/4 NE 1/4 SEC.8, T.41 N., R.10 E., VILAS COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY K, 0.6 MI (1.0 KM) SOUTHWEST OF CONOVER.	176	1967-71#	09-15-76	*73.0
PELICAN RIVER	WISCONSIN RIVER	NW 1/4 NW 1/4 SEC.8, T.36 N., R.9 E., ONEIDA COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY G, AT RHINELANDER.	264	--	01-16-76	*143
SPIRIT RIVER	WISCONSIN RIVER	LAT 45°26'20", LONG 89°44'30", IN SE 1/4 SEC.9, T.34 N., R.6 E., LINCOLN COUNTY, AT BRIDGE DOWNSTREAM FROM FLOWAGE, 2.0 MI (3.2 KM) SOUTH OF TOMAHAWK.	174	--	01-15-76	*114
NEW WOOD RIVER	WISCONSIN RIVER	NW 1/4 SW 1/4 SEC.24, T.32 N., R.5 E., LINCOLN COUNTY, AT BRIDGE ON TOWN ROAD AND 8.4 MI (13.5 KM) NORTHWEST OF MERRILL.	83.1	--	01-13-76	*13.4
COPPER RIVER	WISCONSIN RIVER	NE 1/4 NW 1/4 SEC.6, T.31 N., R.6 E., LINCOLN COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY E, 9.2 MI (14.8 KM) NORTHEAST OF HAMBURG.	94.4	--	01-15-76	*16.0
DEVIL CREEK	WISCONSIN RIVER	SW 1/4 NE 1/4 SEC.15, T.31 N., R.6 E., LINCOLN COUNTY, AT FOSTER STREET BRIDGE IN MERRILL.	27.1	--	01-15-76	*3.27
PRAIRIE RIVER	WISCONSIN RIVER	NW 1/4 SE 1/4 SEC.11, T.31 N., R.6 E., LINCOLN COUNTY, AT 3RD STREET BRIDGE IN MERRILL.	231	--	01-15-76	*118
PINE RIVER	WISCONSIN RIVER	SW 1/4 NE 1/4 SEC.22, T.31 N., R.7 E., LINCOLN COUNTY, AT TOWN ROAD, 4.5 MI (7.2 KM) SOUTHEAST OF MERRILL.	118	--	01-14-76	*16.6
COUNTY LINE CREEK	WISCONSIN RIVER	NW 1/4 NE 1/4 SEC.11, T.30 N., R.7 E., MARATHON COUNTY, AT BRIDGE ON TOWN ROAD, 5.6 MI (9.0 KM) SOUTH OF MERRILL.	12.7	--	01-14-76	*2.06
TRAPPE RIVER	WISCONSIN RIVER	NW 1/4 NW 1/4 SEC.19, T.30 N., R.8 E., MARATHON COUNTY, JUST EAST OF COUNTY TRUNK HIGHWAY W, AND 4.0 MI (6.4 KM) NORTHEAST OF BROKAW.	79.2	--	01-14-76	*7.91
RIB RIVER	WISCONSIN RIVER	LAT 44°58'25", LONG 89°54'15", IN NW 1/4 NW 1/4 SEC.27, T.29 N., R.5 E., MARATHON COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY S, IN RIB FALLS, AND 6.0 MI (9.7 KM) DOWNSTREAM FROM BLACK CREEK.	309	1925-57#	01-12-76	*55.4
RIB RIVER	WISCONSIN RIVER	SW 1/4 SW 1/4 SEC.36, T.29 N., R.5 E., MARATHON COUNTY, AT BRIDGE ON STATE HIGHWAY 29, 1.4 MI (2.2 KM) NORTHWEST OF MARATHON.	316	--	01-13-76	*48.4
LITTLE RIB RIVER	WISCONSIN RIVER	NE 1/4 NE 1/4 SEC.32, T.29 N., R.7 E., MARATHON COUNTY, AT BRIDGE ON STATE HIGHWAY 29, 3.2 MI (5.1 KM) WEST OF WAUSAU POST OFFICE.	79.8	--	01-13-76	*12.7
EAU CLAIRE RIVER	WISCONSIN RIVER	SW 1/4 NW 1/4 SEC.9, T.28 N., R.8 E., MARATHON COUNTY, AT CAMP PHILLIPS, 3.65 MI (5.9 KM) SOUTHEAST OF WAUSAU.	450	--	01-16-76	*99.2

* BASE FLOW,
OPERATED AS A CONTINUOUS-RECORD GAGING STATION.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

STREAM	TRIBUTARY TO	LOCATION	DRAINAGE AREA (MI ²)	MEASURED PREVIOUSLY (WATER YEARS)	MEASUREMENTS	
					DATE	DISCHARGE (FT ³ /S)
WISCONSIN RIVER BASIN--CONTINUED						
FOURMILE CREEK	WISCONSIN RIVER	NE 1/4 NW 1/4 SEC.8, T.27 N., R.7 E., MARATHON COUNTY, 0.2 MI (0.3 KM) DOWNSTREAM FROM COUNTY TRUNK HIGHWAY KK, AND 3.3 MI (5.3 KM) NORTH OF MOSINEE.	24.3	--	01-16-76	*11.4
BULL JUNIOR CREEK	WISCONSIN RIVER	S. 1/4 SW 1/4 SEC.21, T.27 N., R.7 E., MARATHON COUNTY, AT BRIDGE ON TOWN ROAD, 1.5 MI (2.4 KM) NORTHEAST OF MOSINEE.	26.4	--	01-16-76	*7.55
JOHNSON CREEK	WISCONSIN RIVER	SE 1/4 SE 1/4 SEC.23, T.26 N., R.7 E., MARATHON COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY C, 2.6 MI (4.2 KM) EAST OF KNOWLTON.	28.6	--	01-15-76	*1.68
LITTLE EAU CLAIRE RIVER	WISCONSIN RIVER	SW 1/4 NW 1/4 SEC.6, T.25 N., R.8 E., PORTAGE COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY X, 4.5 MI (7.2 KM) SOUTHEAST OF KNOWLTON.	49.2	--	01-14-76	*1.54
LITTLE EAU CLAIRE RIVER TRIBUTARY	LITTLE EAU CL RIVER	NW 1/4 SW 1/4 SEC.6, T.25 N., R.8 E., PORTAGE COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY X, 4.7 MI (7.6 KM) SOUTHEAST OF KNOWLTON.	3.95	--	01-14-76	*.92
PLOVER RIVER	WISCONSIN RIVER	NW 1/4 NE 1/4 SEC.34, T.24 N., R.8 E., PORTAGE COUNTY, AT BRIDGE ON U.S. HIGHWAY 10 IN STEVENS POINT.	166	--	01-14-76	*118
LITTLE PLOVER RIVER	WISCONSIN RIVER	NE 1/4 SE 1/4 SEC.16, T.23 N., R.8 E., PORTAGE COUNTY, AT RAILROAD CULVERT DOWNSTREAM FROM SPRINGVILLE POND AT PLOVER.	21.3	--	01-14-76	*8.64
MILL CREEK	WISCONSIN RIVER	NW 1/4 NE 1/4 SEC.22, T.23 N., R.7 E., PORTAGE COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY P, 2.0 MI (3.2 KM) NORTH OF MEEHAN.	129	--	01-13-76	*14.2
MOSQUITO CREEK	WISCONSIN RIVER	NE 1/4 NW 1/4 SEC.23, T.23 N., R.6 E., WOOD COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY P, 3.2 MI (5.1 KM) NORTH OF WISCONSIN RAPIDS.	17.4	--	01-13-76	*1.81
QUINELL CREEK	WISCONSIN RIVER	SW 1/4 SE 1/4 SEC.3, T.22 N., R.6 E., WOOD COUNTY, AT BRIDGE ON STATE HIGHWAY 54, 2.9 MI (4.7 KM) NORTHEAST OF WISCONSIN RAPIDS.	4.02	--	01-13-76	*1.37
NEPCO LAKE OUTLET	WISCONSIN RIVER	NE 1/4 SE 1/4 SEC.36, T.22 N., R.5 E., WOOD COUNTY, AT DAM AT COUNTY TRUNK HIGHWAY Z, AND 3.6 MI (5.8 KM) SOUTH OF POST OFFICE AT WISCONSIN RAPIDS.	165	--	01-13-76	43.7
BIG ROCHE A CRI CREEK	WISCONSIN RIVER	SW 1/4 NW 1/4 SEC.20, T.18 N., R.5 E., ADAMS COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY Z, 2.6 MI (4.2 KM) WEST OF ARKDALE.	151	--	01-12-76	*109
LITTLE ROCHE A CRI CREEK	WISCONSIN RIVER	SE 1/4 NE 1/4 SEC.4, T.17 N., R.5 E., ADAMS COUNTY, AT BRIDGE ON COUNTY TRUNK HIGHWAY J, 4.0 MI (6.4 KM) NORTHWEST OF ADAMS.	133	--	01-12-76	*64.2
YELLOW RIVER	WISCONSIN RIVER	LAT 44°01'30", LONG 90°04'15", IN SW 1/4 SEC.18, T.18 N., R.4 E., JUNEAU COUNTY, AT POWERPLANT OF WISCONSIN POWER AND LIGHT CO., AT NECEDAH, AND 5.0 MI (8.0 KM) DOWNSTREAM FROM CRANBERRY CREEK.	526	1941-57#	01-12-76	164

* BASE FLOW.

OPERATED AS A CONTINUOUS-RECORD GAGING STATION.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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STREAM	TRIBUTARY TO	LOCATION	DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1976		MEASUREMENTS	
			DRAINAGE AREA (MI ²)	MEASURED PREVIOUSLY (WATER YEARS)	DATE	DISCHARGE (FT ³ /S)
WISCONSIN RIVER BASIN--CONTINUED						
KNAPP CREEK	WEST FORK KICKAPOO RIVER	LAT 43°40'05", LONG 90°46'55", IN NE 1/4 NW 1/4 SEC.30, T.14 N., R.3 E., VERNON COUNTY, 0.4 MI (0.6 KM) UPSTREAM FROM CONFLUENCE WITH WEST FORK KICKAPOO RIVER, 1.7 MI (2.7 KM) NORTH OF BLOMINGDALE, AND 4.1 MI (6.6 KM) EAST OF WESTBY.	8.47	1955-69#	06-29-76 08-16-76	4.92 *1.76
ROCK RIVER BASIN						
YAHARA RIVER	ROCK RIVER	NE 1/4 SW 1/4 SEC.18, T.4 N., R.12 E., ROCK COUNTY, AT FIRST BRIDGE DOWNSTREAM FROM DAM AT COUNTY TRUNK HIGHWAY N, AT FULTON.	528	1967	10-01-75	203

* BASE FLOW.

OPERATED AS A CONTINUOUS-RECORD GAGING STATION.

WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
STREAMS TRIBUTARY TO LAKE SUPERIOR

04026005 - BOIS BRULE RIVER NEAR LAKE SUPERIOR, WI (LAT 46 42 20 LONG 091 36 07)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Nov. 13, 1975	1700	2.5	216	130	Apr. 29, 1976	1800	11.0	215	120
Jan. 15, 1976	1130	0.0	173	130	May 26, 1976	1200	14.5	169	140
Feb. 4, 1976	1400	0.0	163	120	June 29, 1976	1400	19.5	155	155
Mar. 17, 1976	1400	0.0	170	150	Sept. 22, 1976	0900	10.0	147	140
Mar. 31, 1976	1400	3.0	765	60					

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV , 1975						MAY , 1976					
13...	1700	2.5	216	8	4.7	26...	1200	14.5	169	13	5.9
JAN , 1976						JUN					
15...	1130	.0	173	12	5.6	29...	1700	19.5	155	17	7.1
FEB						AUG					
04...	1400	.0	163	16	7.0	11...	1450	--	160	25	11
MAR						SEP					
17...	1355	.0	170	6	2.8	22...	0730	10.0	147	6	2.4
31...	1345	3.0	765	163	337						
APR											
29...	1135	11.0	215	15	8.7						

04026870 - ALDER CREEK NEAR UPSON, WI (LAT 46 23 09 LONG 090 24 30)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 1, 1975	1500	9.5	3.7	150	Apr. 27, 1976	1610	7.5	29	130
Oct. 31, 1975	1125	5.0	6.8	125	May 27, 1976	1035	14.5	3.8	130
Jan. 6, 1976	0900	0.5	12	100	June 28, 1976	1520	24.0	3.2	90
Feb. 3, 1976	1400	0.0	8.0	100	Sept. 22, 1976	1400	9.0	0.1	-
Mar. 18, 1976	0900	0.0	6.0	120					

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT , 1975						MAY , 1976					
01...	1550	9.5	3.7	1	.01	27...	1100	14.5	3.8	1	.01
JAN , 1976						JUN					
06...	0830	.5	12	1	.03	28...	1600	24.0	3.2	8	.07
FEB						AUG					
03...	1430	.0	8.0	1	.02	10...	1620	14.0	.31	6	.01
MAR						SEP					
18...	1010	.0	6.0	7	.11	22...	1420	9.0	.12	3	.00

04027498 - WHITE RIVER AT RESERVOIR NR SANBORN, WIS.

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP , 1976									
10...	1330	0	1	2	4	6	10	32	78

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STREAMS TRIBUTARY TO LAKE MICHIGAN

454608088275201 - LITTLE BILLERS SWAMP NEAR FENCE, WI (LAT 45 46 08 LONG 088 27 52.01)

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT , 1975										
24...	1430	285	6.8	9.5	70	130	26	30	13	1.5
FEB , 1976										
12...	1000	310	7.1	.5	30	130	0	32	12	1.5
MAY										
26...	1030	175	7.0	8.5	60	91	17	21	9.3	1.0

DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	OIS-SOLVED SULFATE (SO4) (MG/L)	OIS-SOLVED CHLORIDE (CL) (MG/L)
OCT , 1975									
24...	2	.1	1.3	125	0	103	32	18	1.3
FEB , 1976									
12...	2	.1	1.5	216	0	177	27	9.4	1.5
MAY									
26...	2	.0	1.2	90	0	74	14	11	1.4

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	OIS-SOLVED SILICA (SI02) (MG/L)	OIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
OCT , 1975									
24...	.6	11	--	139	.19	.01	.04	.00	.00
FEB , 1976									
12...	.3	13	168	178	.23	.03	.13	.01	.03
MAY									
26...	.1	8.8	133	99	.18	.02	.09	.01	.03

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED IRDN (FE) (UG/L)	OIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
OCT , 1975									
24...	.01	--	--	1.4	.10	.31	170	340	15
FEB , 1976									
12...	.04	--	--	78	2.2	6.7	50	140	18
MAY									
26...	.03	.11	.57	.68	.10	.31	270	250	20

WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED

04063701 - LITTLE BILLERS CREEK NEAR FENCE, WI (LAT 45 46 06 LONG 088 27 50)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
FEB , 1976											
12...	1015	.33	305	7.5	2.5	1	9.0	69	140	12	31
MAY											
26...	1130	.34	280	7.5	7.5	8	9.0	79	140	22	31

DATE	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
FEB , 1976										
12...	16	1.1	2	.0	1.1	160	0	131	8.1	5.7
MAY										
26...	16	1.2	2	.0	1.0	148	0	121	7.5	14

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)
FEB , 1976										
12...	1.0	.2	11	164	146	.22	.15	.09	.40	.01
MAY										
26...	1.1	.1	11	158	149	.21	.15	.04	.18	.01

DATE	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PD4) (MG/L)	DIS-SOLVED IRON (FE) (MG/L)	DIS-SOLVED MANGANESE (MN) (MG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
FEB , 1976										
12...	.03	.10	--	--	.07	.02	.06	20	10	8.6
MAY										
26...	.03	.05	.01	.12	.13	.02	.06	40	0	11

04066000 - MEMONINEE RIVER NEAR PEMBINE, WI (LAT 45 35 56 LONG 087 46 32)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 5, 1975	1010	7.0	1,740	240	May 27, 1976	1345	19.0	2,860	180
Apr. 7, 1976	1025	4.0	8,520	160	Aug. 4, 1976	1040	22.0	1,360	250
Apr. 20, 1976	1530	12.5	13,600	140					

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
APR , 1976						APR , 1976					
07...	1000	4.0	8520	50	1150	20...	1515	12.5	13600	3	110

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED

04069500 - PESHTIGO RIVER AT PESHTIGO, WI (LAT 45 02 49 LONG 087 44 40)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Nov. 18, 1975	1420	5.5	794	320	June 16, 1976	1315	23.5	818	200
Feb. 26, 1976	1330	2.0	850	280	July 29, 1976	0950	25.0	349	260
Mar. 31, 1976	1515	3.0	5,680	210	Sept. 3, 1976	1120	19.0	351	200

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDEED SEDI-MENT (MG/L)	SUS-PENDEED SEDI-MENT DIS-CHARGE (T/DAY)
MAR , 1976	31...	1515	5680	26 399

04071000 - OCONTO RIVER NEAR GILLETT, WI (LAT 44 51 53 LONG 088 18 00)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 30, 1975	1420	8.0	353	250	Apr. 29, 1976	1325	10.5	1,160	160
Nov. 26, 1975	1420	0.0	363	160	June 29, 1976	1155	22.5	291	280
Dec. 29, 1975	1515	0.0	496	260	July 28, 1976	1425	23.0	259	320
Jan. 29, 1976	1250	0.0	344	180	Aug. 30, 1976	1340	22.0	188	220
Feb. 26, 1976	1630	0.0	474	200	Sept. 28, 1976	1240	13.0	235	280
Mar. 31, 1976	1025	2.0	2,570	160					

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDEED SEDI-MENT (MG/L)	SUS-PENDEED SEDI-MENT DIS-CHARGE (T/DAY)
MAR , 1976	31...	0810	2.0 2570	25	173

04071858 - PENSANKEE RIVER NEAR PENSANKEE, WI (LAT 44 49 08 LONG 087 57 12)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Nov. 18, 1975	1550	6.0	34.3	510	May 27, 1976	1240	-	30.1	410
Jan. 6, 1976	1435	0.0	22.7	510	July 29, 1976	1230	24.0	4.79	400
Feb. 26, 1976	1020	0.0	82	400	Sept. 3, 1976	1640	19.5	5.68	215
Mar. 31, 1976	1300	5.5	1,680	300					

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDEED SEDI-MENT (MG/L)	SUS-PENDEED SEDI-MENT DIS-CHARGE (T/DAY)
MAR , 1976	31...	1245	1680	90 488

04073500 FOX RIVER AT BERLIN, WI (LAT 43 57 14 LONG 088 57 08)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Nov. 11, 1975	1210	8.5	861	-	May 5, 1976	1230	12.0	2,350	380
Dec. 16, 1975	1415	1.0	1,120	400	June 15, 1976	1245	25.0	695	-
Mar. 17, 1976	1240	1.0	1,550	280					

WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED

04074950 - WOLF RIVER AT LANGLADE, WI (LAT 45 11 24 LONG 088 44 00)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 2, 1975	1355	10.5	327	180	Apr. 2, 1976	1145	4.5	1,240	130
Jan. 5, 1976	1230	0.0	241	140	May 26, 1976	1400	19.0	475	170
Mar. 12, 1976	1445	0.0	353	150					

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDIMENT (MG/L)	SUS-PENDED SEDIMENT DIS-CHARGE (T/DAY)
APR. 1976	02...	1145	4.5	1240	29 97

04077000 WOLF RIVER AT KESHENA FALLS, WI (LAT 44 53 28 LONG 088 39 18)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 2, 1975	1530	10.0	572	270	Apr. 29, 1976	1520	11.0	1,550	180
Jan. 7, 1976	1050	0.0	671	250					

04078500 EMBARRASS RIVER NEAR EMBARRASS, WI (LAT 44 43 29 LONG 088 44 10)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 1, 1975	1425	6.5	162	300	Mar. 30, 1976	1700	4.0	2,180	160
Nov. 5, 1975	1530	8.5	139	440	May 13, 1976	1100	17.0	283	250
Dec. 3, 1975	1155	0.0	423	320	July 8, 1976	1455	22.0	89	-
Jan. 9, 1976	1510	0.0	142	300	Sept. 2, 1976	1210	17.0	84.7	270
Feb. 12, 1976	1405	0.0	166	380	Sept. 28, 1976	1420	12.0	85.4	390
Mar. 18, 1976	1145	1.5	182	400					

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDIMENT (MG/L)	SUS-PENDED SEDIMENT DIS-CHARGE (T/DAY)
MAR. 1976	30...	1710	4.0	2180	48 283

04079000 WOLF RIVER AT NEW LONDON, WI (LAT 44 23 32 LONG 088 44 25)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Nov. 19, 1975	1115	5.0	1,500	400	Mar. 30, 1976	1430	3.0	10,630	150
Jan. 7, 1976	1415	0.0	1,080	80	May 13, 1976	1525	16.0	3,020	260
Feb. 26, 1976	1335	0.0	1,600	380	July 8, 1976	1220	23.0	815	-

04079602 LITTLE WOLF RIVER NR GALLOWAY, WI (LAT 44 41 27 LONG 089 15 51)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 2, 1975	1200	5.5	9.29	410	Apr. 28, 1976	1500	12.5	41.8	200
Nov. 3, 1975	1415	-	8.78	420	June 3, 1976	1100	15.0	16.5	330
Dec. 30, 1975	1510	0.0	15.7	-	June 3, 1976	1610	15.0	16.5	330
Feb. 13, 1976	1400	0.0	10.3	380	July 14, 1976	1700	22.0	4.80	-
Mar. 18, 1976	1445	3.5	9.77	370	Sept. 8, 1976	1555	21.0	5.24	400

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED

04085200 KEWAUNEE RIVER NEAR KEWAUNEE, WI (LAT 44 27 30 LONG 087 33 23)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 20, 1975	1405	9.0	27.0	-	May 21, 1976	1130	16.0	62.2	560
Nov. 17, 1975	1325	6.0	27.0	-	June 22, 1976	1520	22.5	21.6	380
Dec. 15, 1975	1410	1.0	136	675	July 28, 1976	1240	19.0	15.6	670
Mar. 19, 1976	1245	4.0	136	580	Sept.15, 1976	1025	15.0	9.52	450
Apr. 13, 1976	1200	9.0	120	570					

04085281 EAST TWIN RIVER AT MISHICOT, WI (LAT 44 14 16 LONG 087 38 11)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 22, 1975	0900	9.0	14.9	-	Apr. 13, 1976	0930	6.5	125	370
Dec. 5, 1975	0800	1.0	33.2	540	May 27, 1976	0955	20.5	72.7	520
Jan. 9, 1976	1000	0.0	11.4	650	June 22, 1976	1330	21.0	17.1	575
Mar. 19, 1976	1000	1.0	158	500	Sept.14, 1976	1645	16.5	5.01	600

04085427 MANITOWOC RIVER AT MANITOWOC, WI (LAT 44 06 26 LONG 087 42 55)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Dec. 4, 1975	1635	0.5	172	650	May 20, 1976	1425	20.0	418	580
Jan. 8, 1976	1530	0.0	36.0	-	June 21, 1976	1235	23.0	53.1	750
Apr. 12, 1976	1630	9.5	1,180	440	Sept.14, 1976	1240	20.0	14.1	540

04086000 SHEBOYGAN RIVER AT SHEBOYGAN, WI (LAT 43 44 25 LONG 087 45 37)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 21, 1975	1320	14.5	54.4	-	May 20, 1976	1120	17.0	228	675
Dec. 4, 1975	1410	1.5	198	650	June 21, 1976	0955	21.5	61.7	600
Mar. 18, 1976	1220	1.5	696	575	Sept.14, 1976	1000	18.0	27.6	650
Apr. 12, 1976	1230	9.0	414	535					

04086150 MILWAUKEE RIVER AT KENASKUM, WI (LAT 43 31 02 LONG 088 13 24)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Jan. 27, 1976	1240	0.0	15.5	510	June 25, 1976	1210	18.5	20.4	665
Apr. 19, 1976	1205	14.5	148	460	Aug. 9, 1976	1330	22.0	9.81	600
May 18, 1976	1040	12.0	102	650	Sept.17, 1976	1310	16.0	3.42	730

04086200 EAST BRANCH MILWAUKEE RIVER NEAR NEW FANE, WI (LAT 43 44 01 LONG 088 11 18)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Nov. 25, 1975	1530	0.0	13.7	-	May 18, 1976	1150	14.5	41.0	520
Jan. 27, 1976	1440	0.0	11.7	590	June 23, 1976	1525	22.5	9.69	360
Mar. 15, 1976	1445	2.5	81.1	430	Aug. 9, 1976	1130	21.0	7.10	460
Apr. 2, 1976	1030	5.5	129	350	Sept.17, 1976	1140	16.0	5.62	440
Apr. 19, 1976	1400	15.5	55.2	425					

04086340 NORTH BRANCH MILWAUKEE RIVER NEAR FILLMORE, WI (LAT 43 28 58 LONG 088 03 39)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Dec. 4, 1975	1315	0.0	121	-	May 18, 1976	1500	14.0	121	550
Jan. 28, 1976	1000	0.0	35.1	715	June 25, 1976	1010	18.5	32.4	600
Mar. 22, 1976	1440	5.0	302	500	Aug. 6, 1976	1400	19.5	24.6	600
Apr. 20, 1976	1245	14.0	115	640	Sept.20, 1976	1652	16.0	16.1	580

WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED

04086360 MILWAUKEE RIVER AT WAUBEKA, WI (LAT 43 28 22 LONG 087 59 23)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Dec. 3, 1975	1330	0.0	448	-	May 17, 1976	1310	14.5	361	460
Jan. 28, 1976	1530	0.0	96.4	750	June 24, 1976	1340	19.5	93.8	470
Mar. 23, 1976	1210	5.5	1,090	480	Aug. 6, 1976	1210	20.5	71.2	520
Apr. 9, 1976	1200	9.0	385	585	Sept. 20, 1976	1520	17.0	53.9	645

04086500 CEDAR CREEK NEAR CEDARBURG, WI (LAT 43 19 23 LONG 087 58 43)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Dec. 4, 1975	1645	0.0	87.8	610	June 24, 1976	1150	19.0	34.2	615
Jan. 29, 1976	1130	0.0	31.5	700	Aug. 5, 1976	1140	-	13.8	615
Apr. 2, 1976	1245	6.5	246	600	Aug. 25, 1976	1040	20.0	8.39	640
May 17, 1976	1050	13.5	194	710					

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI (LAT 42 55 30 LONG 087 52 12)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Feb. 3, 1976	1030	0.0	0.95	2,100	Apr. 28, 1976	1120	9.0	60.2	820
Mar. 5, 1976	1300	1.0	756	360	June 14, 1976	1435	23.5	20.7	1,100
Mar. 6, 1976	1110	0.0	262	600	July 13, 1976	1425	24.0	1.29	840
Mar. 7, 1976	1150	1.0	110	975	Aug. 17, 1976	1520	25.0	1.62	780
Mar. 8, 1976	1745	3.5	67.5	995	Sept. 21, 1976	1150	14.0	2.75	-
Mar. 25, 1976	1345	9.5	10.1	1,400					

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
MAR , 1976						MAR , 1976					
05...	1240	1.0	756	720	1470	07...	1205	1.0	110	68	20

04087220 - ROOT RIVER NEAR FRANKLIN, WI (LAT 42 52 25 LONG 087 59 45)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Feb. 6, 1976	1620	0.0	5.17	640	Apr. 27, 1976	1000	6.5	146	760
Mar. 5, 1976	1720	1.0	1,770	-	June 11, 1976	1010	21.5	9.12	1,380
Mar. 8, 1976	1600	3.0	90.7	900	July 12, 1976	1035	22.0	4.10	1,400
Mar. 29, 1976	1600	8.0	104	875	Aug. 17, 1976	1045	18.0	3.39	800

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
MAR , 1976				
15...	1730	1770	176	851

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED

04087233 - ROOT RIVER CANAL NEAR FRANKLIN, WI (LAT 42 48 55 LONG 087 59 40)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Dec. 4, 1975	1410	0.0	5.03	-	Apr. 27, 1976	1315	7.0	410	425
Jan. 22, 1976	1405	0.0	2.31	1,500	Apr. 29, 1976	1100	9.0	162	680
Mar. 6, 1976	1450	1.0	972	370	June 11, 1976	1130	21.5	7.07	870
Mar. 7, 1976	1440	3.0	587	440	July 12, 1976	1245	25.0	2.30	1,100
Apr. 1, 1976	1600	5.0	102	680	Aug. 17, 1976	1220	19.0	2.20	615
Apr. 26, 1976	1215	5.5	743	410					

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDIMENT CHARGE (MG/L)	SUS-PENDED SEDIMENT DIS-CHARGE (T/DAY)	DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDIMENT CHARGE (MG/L)	SUS-PENDED SEDIMENT DIS-CHARGE (T/DAY)		
MAR , 1976	06...	1510	--	972	448	1180	MAR , 1976	06...	1515	--	925	466	1160
DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDIMENT CHARGE (MG/L)	SUS-PENDED SEDIMENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIFVE DIAM. % FINER THAN .062 MM	SUS. SED. SIFVE DIAM. % FINER THAN .125 MM	
MAR , 1976	06...	1515	925	466	1160	85	92	94	95	97	99	100	

04087240 - ROOT RIVER AT RACINE, WI (LAT 42 45 05 LONG 087 49 25)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Feb. 3, 1976	1500	0.0	7.23	1,900	July 19, 1976	1430	15.0	5.93	1,100
Apr. 28, 1976	1420	9.0	1,140	530	Aug. 23, 1976	1145	23.0	5.29	750
June 15, 1976	1120	24.0	59.1	640	Sept. 23, 1976	1135	15.0	7.01	1,180

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDIMENT CHARGE (MG/L)	SUS-PENDED SEDIMENT DIS-CHARGE (T/DAY)	DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDIMENT CHARGE (MG/L)	SUS-PENDED SEDIMENT DIS-CHARGE (T/DAY)		
MAR , 1976	06...	1215	--	2930	289	2290	MAR , 1976	07...	1100	--	2380	218	1400

04087257 - PIKE RIVER NEAR RACINE, WI (LAT 42 30 49 LONG 087 51 30)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Nov. 6, 1975	1145	6.0	12.5	600	Apr. 7, 1976	1145	8.0	102	440
Jan. 6, 1976	1030	0.0	6.72	-	June 15, 1976	1250	20.5	13.5	610
Feb. 4, 1976	1415	0.0	4.18	810	July 21, 1976	1230	15.0	4.17	600
Feb. 27, 1976	1700	4.5	108	540	Aug. 23, 1976	1340	22.0	2.60	450
Mar. 7, 1976	1615	2.5	185	675	Sept. 23, 1976	1255	14.0	3.95	505
Mar. 26, 1976	1300	11.5	21.2	810					

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDIMENT CHARGE (MG/L)	SUS-PENDED SEDIMENT DIS-CHARGE (T/DAY)	DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDIMENT CHARGE (MG/L)	SUS-PENDED SEDIMENT DIS-CHARGE (T/DAY)		
MAR , 1976	06...	1600	--	316	331	282	MAR , 1976	07...	1615	2.5	185	152	76

WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

CHIPPEWA RIVER BASIN

05356000 CHIPPEWA RIVER AT BISHOPS BRIDGE NEAR WINTER, WI (LAT 45 50 57 LONG 091 04 44)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Jan. 5, 1976	1130	1.0	1,160	70	Apr. 27, 1976	1200	4.5	1,490	90
Jan. 30, 1976	1330	1.0	1,090	100	June 18, 1976	1500	20.5	225	70
Mar. 19, 1976	1330	6.0	936	80	Sept. 23, 1976	1400	15.0	141	90

05356500 CHIPPEWA RIVER NEAR BRUCE, WI (LAT 45 27 08 LONG 091 15 39)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Nov. 14, 1975	1430	1.0	2,610	80	May 26, 1976	1500	19.0	539	95
Jan. 9, 1976	1430	0.0	1,160	65	July 6, 1976	1500	26.0	752	100
Feb. 12, 1976	1400	0.0	1,498	105	Aug. 19, 1976	1200	25.0	389	120
Apr. 29, 1976	1530	12.0	2,010	60	Sept. 29, 1976	1400	11.0	331	120

460407089315201 - BOBS LAKE MARSH NEAR BOULDER JUNCTION, WI (LAT 46 04 07 LONG 089 31 52.01)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (CA, MG)	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)
FEB , 1976										
10...	1700	110	5.8	.0	75	52	51	15	3.6	2.4
MAY										
27...	1420	148	5.8	18.5	65	46	17	13	3.3	3.3

DATE	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
FEB , 1976									
10...	9	.1	.1	2	0	2	5.1	8.0	4.2
MAY									
27...	12	.2	3.9	35	0	29	89	12	7.0

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS PER AC-FT) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
FEB , 1976									
10...	.3	27	147	63	.20	.04	.18	.03	.10
MAY									
27...	.1	6.5	85	67	.12	.02	.09	.01	.03

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
FEB , 1976									
10...	.07	--	--	110	.52	1.6	1100	30	34
MAY									
27...	.03	.35	5.2	5.6	24	74	210	80	36

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

CHIPPEWA RIVER BASIN--CONTINUED

460406089315501 - BOBS LAKE NEAR BOULDER JUNCTION, WI (LAT 46 04 06 LONG 089 31 55.01)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	
FEB , 1976											
10...	1645	90	6.0	.5	3	6.5	47	32	1	8.5	
MAY											
27...	1450	115	7.5	21.5	14	9.5	112	35	2	7.5	
DATE	TIME	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
FEB , 1976											
10...	2.6	2.6	15	.2	.7	38	0	31	61	3.5	
MAY											
27...	3.9	3.3	17	.2	.5	40	0	33	2.0	2.4	
DATE	TIME	OIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	OIS- SOLVED SOLIDS (TOMS AC-FT) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)
FEB , 1976											
10...	3.2	.2	3.8	49	45	.07	.15	.66	.01	.03	
MAY											
27...	4.6	.1	.7	45	43	.06	.00	.00	.00	.00	
DATE	TIME	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED ORGANIC CARBON (C) (MG/L)	
FEB , 1976											
10...		.16	--	--	.79	.06	.18	350	30	11	
MAY											
27...		.00	.09	.61	.70	.03	.09	100	0	5.1	

05357143 - WHITE BIRCH CREEK AT HWY K NEAR BOULDER JCT, WI (LAT 46 04 03 LONG 089 31 36)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	
MAY , 1976											
27...	1330	115	7.5	20.5	9	6.5	76	32	4	9.0	
DATE	TIME	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
MAY , 1976											
27...	2.3	1.1	7	.1	.6	34	0	28	1.7	2.6	

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

CHIPPEWA RIVER BASIN--CONTINUED

05357143 - WHITE BIRCH CREEK AT HWY K NEAR BOULDER JCT, WI (LAT 46 04 03 LONG 089 31 36)

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
MAY 1976 27...	.6	.1	.6	37	34	.05	.01	.04	.00	.00

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
MAY 1976 27...	.01	.04	.39	.43	.03	.09	30	0	12

05357144 - WHITE BIRCH CR BELDW AQUALAND NR BOULDER JCT, WI (LAT 46 04 04 LONG 089 31 45)

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)
MAY 1976 27...	1400	115	7.5	19.5	12	5.0	57	30	1	9.0

DATE	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED PD-TASIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
MAY 1976 27...	1.9	1.1	7	.1	.6	36	0	30	1.8	2.6

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
MAY 1976 27...	.6	.1	.6	42	34	.06	.01	.04	.00	.00

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
MAY 1976 27...	.01	.05	.40	.45	.03	.09	30	0	7.8

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

CHIPPEWA RIVER BASIN--CONTINUED

460345089331401 - LAZY TURTLE BOG POND NEAR BOULDER JUNCTION, WI (LAT 46 03 45 LONG 089 33 14.01)

DATE	TIME	SPE-CIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)
FEB , 1976										
18...	1730	40	5.5	.0	3	5.5	40	2	0	.5
MAY										
25...	0900	19	6.0	17.0	13	7.0	75	5	1	1.6

DATE	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED PHOSPHORIUM (MG/L)	BICARBONATE (MG/L)	CARBONATE (MG/L)	ALKALINITY AS CAC03 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
FEB , 1976										
18...	.2	.0	0	.0	.3	6	0	5	30	3.0
MAY										
25...	.3	.1	4	.0	.3	5	0	4	8.0	2.0

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 100 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS PER (TONS AC-FT)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
FEB , 1976										
18...	.8	.2	.3	27	9	.04	.04	.18	.01	.03
MAY										
25...	.3	.0	.1	9	7	.01	.00	.00	.00	.00

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (MG/L)	DIS-SOLVED MANGANESE (MN) (MG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
FEB , 1976									
18...	.05	--	--	.80	.05	.15	70	40	13
MAY									
25...	.00	.04	.46	.50	.03	.09	40	30	7.4

460343089331801 - LAZY TURTLE BOG NEAR BOULDER JUNCTION, WI (LAT 46 03 43 LONG 089 33 18.01)

DATE	TIME	SPE-CIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)
FEB , 1976										
18...	1700	75	3.8	.0	90	9	6	3.0	.4	.6
MAY										
25...	1030	35	4.8	12.5	90	12	6	4.5	.3	.1

DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED PHOSPHORIUM (K) (MG/L)	BICARBONATE (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CAC03 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
FEB , 1976									
18...	10	.1	2.2	4	0	3	1010	4.5	2.7
MAY									
25...	2	.0	.6	8	0	7	203	3.1	1.1

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

CHIPPEWA RIVER BASIN--CONTINUED

460343089331801 - LAZY TURTLE BOG NEAR BOULDER JUNCTION, WI (LAT 46 03 43 LONG 089 33 18.01)

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
FEB , 1976									
18...	.2	1.5	61	20	.08	.00	.00	.01	.03
MAY 25...	.0	.5	33	14	.04	.01	.04	.01	.03

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PD4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
FEB , 1976									
18...	.01	--	--	110	3.2	9.8	430	30	35
MAY 25...	.02	.28	6.5	6.8	.33	1.0	140	40	26

05357225 - STEVENSON CREEK NEAR BDULDER JUNCTION, WI (LAT 46 03 41 LONG 089 38 47)

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH	TEMPERATURE (DEG C)	COLOR (PLAT-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	OIS-SOLVED CALCIUM (CA) (MG/L)
FEB , 1976										
10...	0830	120	7.5	1.5	25	4.0	30	49	0	14
MAY 27...	0900	105	7.0	14.5	14	7.5	76	41	3	11

DATE	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODDIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CD2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
FEB , 1976										
10...	3.4	1.4	6	.1	.7	68	0	56	3.4	3.9
MAY 27...	3.3	1.4	7	.1	.6	46	0	38	7.4	2.6

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
FEB , 1976										
10...	1.2	.2	18	72	77	.10	.07	.31	.02	.07
MAY 27...	.8	.1	8.2	56	51	.08	.01	.04	.00	.00

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PD4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
FEB , 1976									
10...	.09	--	--	.39	.04	.12	210	160	9.6
MAY 27...	.01	.03	.35	.36	.03	.09	390	40	12

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

CHIPPEWA RIVER BASIN--CONTINUED

46033B089384301 - STEVENSON CREEK SWAMP NEAR BOULDER JUNCTIDN, WI (LAT 46 03 38 LONG 089 38 43.01)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	CDLDR (PLAT- INUM- COBALT UNITS)	HARD- NESS (CA, MG)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
MAY, 1976										
27...	0930	105	6.0	9.5	100	41	21	11	3.2	1.5

DATE	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PD- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLD- RIDE (CL) (MG/L)
MAY, 1976									
27...	7	.1	.1	24	0	20	38	4.2	3.1

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)
MAY, 1976									
27...	.1	9.8	67	45	.09	.01	.04	.01	.03

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L)
MAY, 1976									
27...	.02	.04	.89	.93	.04	.12	470	0	24

460110089352201 - BLUEBERRY LAKE BOG PDND NR BOULDER JUNCTIDN, WI (LAT 46 01 10 LONG 089 35 22.01)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
FEB, 1976										
19...	1615	28	5.3	.0	50	1.0	7	3	0	1.0
MAY										
25...	1430	35	5.5	20.5	55	7.0	81	13	6	3.8

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
FEB, 1976										
19...	.2	.1	5	.0	.7	4	0	3	32	3.7
MAY										
25...	.8	.1	2	.0	.4	8	0	7	40	2.7

WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

CHIPPEWA RIVER BASIN--CONTINUED

460110089352201 - BLUEBERRY LAKE BOG POND NR BOULDER JUNCTION, WI (LAT 46 01 10 LONG 089 35 22.01)

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLID, (RESIDUE AT 100 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
FEB , 1976										
19...	.8	.1	1.7	38	11	.05	.01	.04	.00	.00
MAY 25...	2.0	.0	.3	23	14	.03	.00	.00	.00	.00

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
FEB , 1976									
19...	.01	--	--	2.0	.07	.21	220	40	22
MAY 25...	.00	.03	.50	.53	.05	.15	170	40	25

460110089352001 - BLUEBERRY LAKE BOG NEAR BOULDER JUNCTION, WI (LAT 46 01 10 LONG 089 35 20.01)

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
FEB , 1976										
19...	1600	62	4.5	.0	220	5	3	1.5	.3	.4
MAY 25...	1430	75	4.5	14.5	150	4	4	1.2	.3	.1

DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
FEB , 1976									
19...	11	.1	1.6	2	0	2	101	7.4	1.6
MAY 25...	5	.0	.2	0	0	0	.0	5.7	1.7

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 100 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
FEB , 1976									
19...	.2	2.3	90	17	.12	.07	.31	.01	.03
MAY 25...	.1	.6	53	11	.07	.02	.09	.00	.03

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
FEB , 1976									
19...	.08	--	--	100	3.1	9.5	520	50	43
MAY 25...	.03	.13	4.8	4.9	.24	.74	360	70	38

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

CHIPPEWA RIVER BASIN--CONTINUED

05360500 FLAMBEAU RIVER NEAR BRUCE, WI (LAT 45 22 21 LONG 091 12 34)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Nov. 14, 1975	1100	4.5	4,430	100	May 26, 1976	1300	19.0	800	90
Jan. 9, 1976	1230	0.0	1,290	-	July 6, 1976	1300	25.5	846	80
Feb. 12, 1976	1130	0.0	883	125	Aug. 19, 1976	1000	24.5	740	110
Mar. 23, 1976	1300	1.0	2,300	120	Sept. 29, 1976	1200	11.5	418	115
Apr. 29, 1976	1300	12.5	2,570	70					

05362000 JUMP RIVER AT SHELDON, WI (LAT 45 18 29 LONG 090 57 23)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 24, 1975	1100	13.5	99.2	-	May 27, 1976	1200	19.0	98.8	120
Dec. 29, 1975	1500	0.0	228	135	June 29, 1976	1200	21.5	62.9	155
Jan. 29, 1976	1330	0.0	162	130	July 30, 1976	1200	25.0	42.3	120
Feb. 26, 1976	1200	0.0	234	180	Aug. 26, 1976	1130	23.5	22.8	205
Mar. 25, 1976	1400	0.0	3,820	100	Sept. 22, 1976	1400	11.0	27.3	210
Apr. 27, 1976	1430	10.5	1,100	<50					

05365500 CHIPPEWA RIVER AT CHIPPEWA FALLS, WI (LAT 44 55 35 LONG 091 24 33)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Nov. 13, 1975	1100	6.0	19,300	200	July 8, 1976	1130	24.0	274	180
Mar. 24, 1976	1500	3.5	9,500	140	Aug. 26, 1976	1430	24.0	6,000	150
May 7, 1976	1030	12.0	8,030	135	Aug. 31, 1976	0800	22.0	261	210
May 28, 1976	1130	16.5	264	320					

05367055 - CHIPPEWA RIVER NEAR CARYVILLE, WI (LAT 44 45 38 LONG 091 40 30)

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDEO SEDI-MENT (MG/L)	SUS-PENDEO SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SIEVE % FINER THAN .062 MM
AUG. 1976					
30...	1700	1080	5	15	63
SEP					
14...	1335	1310	6	21	--
18...	1530	890	6	14	--
20...	1430	1150	7	22	71
20...	1500	1150	2	6.2	--
27...	1805	870	6	14	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG. 1976												
30...	1430	--	--	1	2	17	36	43	50	61	87	100
SEP												
20...	1045	1150	1	2	5	22	42	47	53	62	87	100

05367425 RED CEDAR RIVER NEAR CAMERON, WI (LAT 45 24 05 LONG 091 46 39)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Dec. 1, 1975	1100	0.0	462	210	June 17, 1976	1600	23.0	204	150
May 10, 1976	1030	12.5	263	140	July 26, 1976	1600	25.0	210	160
May 28, 1976	1500	17.0	198	170	Sept. 3, 1976	1430	20.5	143	120

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

CHIPPEWA RIVER BASIN--CONTINUED

05371200 - CHIPPEWA RIVER NEAR PEPIN, WI (LAT 44 26 15 LONG 092 04 30)

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE DIS- CHARGE (MG/L)	SUS- PENDE DIS- CHARGE (T/DAY)	DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE DIS- CHARGE (MG/L)	SUS- PENDE DIS- CHARGE (T/DAY)
SEP , 1976						SEP , 1976					
01...	0900	--	2690	14	102	20...	1045	--	2500	18	121
11...	1255	--	2660	23	165	24...	1015	--	2310	12	75
15...	1415	--	3380	21	192	27...	1222	--	2400	14	91
20...	1000	--	2498	11	74						

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP , 1976										
01...	1100	1	4	38	70	81	87	93	99	100
20...	1030	1	4	42	84	93	97	99	100	--

TREMPEALEAU RIVER BASIN

05379500 TREMPEALEAU RIVER AT DODGE, WI (LAT 44 07 55 LONG 091 33 14)

Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance	Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance
Nov. 21, 1975	1130	4.5	765	280	June 30, 1976	1150	19.5	339	275
Jan. 16, 1976	1410	0.0	332	265	Aug. 11, 1976	1025	22.5	277	260
Feb. 27, 1976	1050	4.5	710	230	Sept. 17, 1976	1000	14.5	246	265
Mar. 25, 1976	1000	7.0	598	-					

BLACK RIVER BASIN

05381000 BLACK RIVER AT NEILLSVILLE, WI (LAT 44 33 35 LONG 090 36 54)

Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance	Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance
Feb. 9, 1976	1255	0.0	96	180	July 8, 1976	1750	28.5	21.3	200
Mar. 25, 1976	1550	2.5	5,090	80	Aug. 25, 1976	1205	26.0	13.5	240
May 24, 1976	1225	19.0	151	130					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	INSTAN- TANEDUS DIS- CHARGE (CFS)	SUS- PENDE DIS- CHARGE (MG/L)	SUS- PENDE DIS- CHARGE (T/DAY)
MAR , 1976				
2S...	1610	5040	29	395

WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN

455119089404801 - MID LAKE MARSH NEAR MINDCQUA, WI (LAT 45 51 19 LONG 089 40 48.01)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
FEB , 1976										
09...	1615	170	7.0	.5	45	52	30	12	5.3	6.7
MAY										
24...	1815	192	6.5	19.0	100	63	38	15	6.2	9.1

DATE	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
FEB , 1976									
09...	21	.4	1.2	26	0	21	4.2	2.0	26
MAY									
24...	23	.5	1.5	30	0	25	15	4.0	34

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)
FEB , 1976									
09...	.3	15	107	82	.15	.04	.18	.01	.03
MAY									
24...	.1	4.8	153	91	.21	.00	.00	.01	.03

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED ORGANIC CARBON (C) (MG/L)
FEB , 1976									
09...	.05	--	--	34	1.4	4.3	130	80	14
MAY									
24...	.01	.10	1.7	1.8	.08	.25	990	70	26

455021089401701 - JYME LAKE NEAR MINOCQUA, WI (LAT 45 50 21 LONG 089 40 17.01)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
FEB , 1976										
10...	1100	27	5.6	.5	35	5.0	36	6	2	2.0
MAY										
26...	1700	15	6.0	26.0	48	6.5	83	8	2	2.5

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
FEB , 1976										
10...	.3	.1	3	.0	.9	5	0	4	20	4.6
MAY										
26...	.4	.1	2	.0	.5	7	0	6	11	3.1

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

455021089401701 - JYME LAKE NEAR MINOCQUA, WI (LAT 45 50 21 LONG 089 40 17.01)

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
FEB , 1976										
10...	1.5	.1	1.6	33	15	.04	.08	.35	.03	.10
MAY 26...	1.5	.1	.1	28	12	.04	.01	.04	.00	.00

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
FEB , 1976									
10...	.11	--	--	1.3	.06	.18	420	70	30
MAY 26...	.01	.10	.70	.80	.07	.21	190	50	15

455023089401601 - JYME LAKE BOG NEAR MINOCQUA, WI (LAT 45 50 23 LONG 089 40 16.01)

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)
MAY , 1976										
26...	1800	35	4.5	23.0	130	2	2	.7	.1	.1

DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
MAY , 1976									
26...	5	.0	1.3	0	0	0	.0	5.0	1.8

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
MAY , 1976									
26...	.0	.9	41	10	.06	.03	.13	.01	.03

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
MAY , 1976									
26...	.04	.34	7.6	7.9	.51	1.6	260	50	36

WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

05391000 WISCONSIN RIVER AT RAINBOW LAKE, NEAR LAKE TOMAHAWK, WI (LAT 45 49 58 LONG 089 32 51)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 6, 1975	1315	9.0	458	100	June 2, 1976	1500	20.0	625	100
Nov. 11, 1975	1310	7.5	246	70	July 21, 1976	1500	24.0	551	120
Feb. 19, 1976	1325	1.5	1,090	60	Sept. 9, 1976	1330	17.0	364	70
Apr. 27, 1976	1320	8.0	762	60					

05392070 - TOMAHAWK RIVER NEAR MINOCQUA, WI (LAT 45 51 19 LONG 089 40 42)

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH	TEMPERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	HARD-NESS (CA, MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)
FEB , 1976										
09...	1630	110	7.6	2.0	1	9.5	72	39	0	10
MAY										
24...	1700	92	7.5	20.0	21	8.5	98	46	5	13

DATE	DIS-SOLVED MAG-NE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATID	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
FEB , 1976										
09...	3.3	1.6	8	.1	.5	50	0	41	2.0	3.3
MAY										
24...	3.3	1.8	8	.1	.6	50	0	41	2.5	3.1

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
FEB , 1976										
09...	1.7	.2	5.3	53	51	.07	.10	.44	.01	.03
MAY										
24...	2.4	.1	1.9	54	51	.07	.00	.00	.00	.00

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
FEB , 1976									
09...	.11	--	--	.25	.03	.09	70	30	9.7
MAY									
24...	.00	.04	.61	.65	.05	.15	60	10	9.7

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

05393500 SPIRIT RIVER AT SPIRIT FALLS, WI (LAT 45 26 58 LONG 089 58 47)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 3, 1975	1300	10.5	29.6	100	Mar. 31, 1976	1335	1.0	1,480	65
Nov. 19, 1975	1020	7.0	133	50	May 20, 1976	1155	19.5	38.7	80
Jan. 13, 1976	1135	0.0	25.1	75	July 14, 1976	1600	30.0	3.34	170
Mar. 16, 1976	1345	0.0	29.9	50	Sept. 17, 1976	1610	19.5	3.10	160

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DIS-CHARGE (T/DAY)
MAR , 1976					
31...	1400	1.0	1480	12	48

05394500 PRAIRIE RIVER NEAR MERRILL, WI (LAT 45 14 09 LONG 089 38 59)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 2, 1975	1050	8.0	94.7	160	May 11, 1976	1505	17.0	188	120
Nov. 17, 1975	1410	5.0	183	200	June 10, 1976	1410	21.0	89.8	-
Jan. 12, 1976	1130	0.5	99.1	180	July 15, 1976	1105	21.5	69.6	-
Feb. 24, 1976	1540	0.5	120	210	Aug. 25, 1976	1405	21.0	65.3	120
Mar. 29, 1976	1220	2.0	1,135	70	Sept. 22, 1976	1405	10.0	85.1	180

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DIS-CHARGE (T/DAY)
MAR , 1976					
29...	1220	1.0	1140	16	49

05395000 WISCONSIN RIVER AT MERRILL, WI (LAT 45 10 41 LONG 089 40 52)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Nov. 3, 1975	1255	13.0	1,470	180	May 20, 1976	1555	16.0	2,410	160
Jan. 12, 1976	1600	3.5	3,170	200	July 9, 1976	1245	23.0	1,340	-
Mar. 29, 1976	1515	1.0	8,660	70					

05397110 EAU CLAIRE RIVER NEAR ANTIGO, WI (LAT 45 07 32 LONG 089 14 01)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 2, 1975	1215	7.0	52.0	225	May 26, 1976	1020	14.5	105	165
Jan. 9, 1976	1135	0.0	46.5	50	June 10, 1976	1620	25.0	52.3	280
Mar. 10, 1976	1350	0.0	68.5	170	July 29, 1976	1245	19.5	39.7	-
Apr. 2, 1976	1415	-	898	100					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DIS-CHARGE (T/DAY)
APR , 1976					
02...	1425	8.0	898	30	73

WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

05397500 EAU CLAIRE RIVER AT KELLY, WI (LAT 44 55 06 LONG 089 33 00)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 2, 1975	1335	8.0	81.0	260	Apr. 28, 1976	1340	9.0	406	120
Nov. 3, 1975	1215	-	86.2	230	May 12, 1976	1445	16.0	187	200
Jan. 14, 1976	1230	0.0	79.1	110	Aug. 20, 1976	1505	20.0	62.8	-
Feb. 24, 1976	1230	0.0	99.9	240					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
MAR. 1976					
29...	1500	1.5	2940	31	238

05398000 WISCONSIN RIVER AT ROTHSCHILD, WI (LAT 44 53 09 LONG 089 38 05)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Nov. 3, 1975	1610	10.0	2,190	180	May 20, 1976	1320	16.5	4,010	200
Mar. 19, 1976	1600	3.5	3,550	170	July 14, 1976	1400	25.5	1,330	220
Mar. 29, 1976	1440	1.0	21,700	-					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
MAR. 1976					
29...	1440	21700	38	2230	

05399550 - FENWOOD CREEK AT BRADLEY, WI (LAT 44 48 03 LONG 089 58 24)

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV. 1975						MAR. 1976					
24...	1530	--	4.0	4	.04	16...	1050	.0	11	5	.15
JAN. 1976						25...	1500	--	495	32	43
14...	1445	.0	3.0	8	.06	MAY					
FEB						22...	1250	19.5	8.6	8	.19
19...	1130	.0	12	50	1.6						

05399580 - FREEMAN CREEK AT HALDER, WI (LAT 44 47 11 LONG 089 51 42)

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV. 1975						MAY. 1976					
24...	1450	--	17	2	.09	22...	1330	--	12	8	.26
JAN. 1976						JUL					
14...	1420	--	5.0	5	.07	07...	1645	--	1.3	1	.00
FEB						AUG					
19...	1100	.0	15	4	.16	24...	1225	--	.89	2	.00
MAR											
16...	1030	.0	13	13	.48						
25...	1540	--	245	62	41						

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

05400650 LITTLE PLOVER RIVER AT PLOVER, WI (LAT 44 28 26 LONG 089 31 44)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 1, 1975	1515	11.0	9.17	310	May 24, 1976	1155	12.5	14.0	210
Nov. 4, 1975	1540	-	8.09	300	July 9, 1976	1200	16.0	7.55	380
Jan. 13, 1976	1125	3.5	8.49	340	Aug. 19, 1976	1245	18.0	6.27	360
Feb. 20, 1976	1130	6.0	8.39	310					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DIS-CHARGE (T/DAY)
MAR. 1976				
26...	1605	21	6	.34

05400885 - TWOMILE CREEK NEAR MEEHAN, WI

WATER QUALITY DATA

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM
OCT. 1975											
23...	1415	.36	140	6.8	18.0	66	27	17	5.8	2.6	8
NOV 14...	1150	.43	155	--	7.5	--	--	--	--	--	--
DEC 22...	1450	--	130	6.6	5.0	--	--	--	--	--	--

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 1975											
23...	.1	.7	48	0	39	12	14	7.7	.6	13	92
NOV 14...	--	.7	46	--	38	--	--	--	--	--	--
DEC 22...	--	.6	48	0	39	19	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PFR DAY)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)
OCT. 1975											
23...	.13	.09	1.4	1.4	6.2	.01	.01	.03	1.4	1.4	.0
NOV 14...	--	--	1.5	--	--	.02	--	--	1.5	--	--
DEC 22...	--	--	1.5	--	--	.01	--	--	1.5	--	--

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	DIS-SOLVED AMMONIA NITROGEN (N) (MG/L)	DIS-SOLVED AMMONIA (NH4) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	DIS-SOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-OAHL NITROGEN (N) (MG/L)	DIS-SOLVED KJEL-NITROGEN (N) (MG/L)	TOTAL KJEL-NITROGEN IN ROTTEN MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT. 1975											
23...	.06	.08	.10	.71	.17	.77	.25	360	2.2	9.6	.04
NOV 14...	.08	--	--	.16	--	.24	--	--	1.7	7.7	.04
DEC 22...	.04	--	--	.08	--	.12	--	--	1.6	7.2	.02

WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

05400885 - TWOMILE CREEK NEAR MEEMAN, WIS.

DATE	DIS-SOLVED- PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHATE (P04) (MG/L)	DIS- HYDRO- LYZABLE PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORGANIC PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS IN BOT- TOM MA- TERIAL (MG/KG)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOT- TOM MA- TERIAL (G/KG)	IN- ORGANIC CARBON IN BOT- TOM MA- TERIAL (G/KG)
OCT , 1975											
23...	.00	.00	.00	.00	.00	.00	100	310	4.4	5.2	.0
NOV											
14...	--	--	--	--	--	--	--	720	--	--	--
DEC											
22...	--	--	--	--	--	--	--	520	--	--	--

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MA- TERIAL (UG/G)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CO) (UG/L)	TOTAL CADMIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL CHRO- MIUM IN BOTTOM MA- TERIAL (UG/G)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MA- TERIAL (UG/G)
OCT , 1975											
23...	1415	.36	0	2	0	0	<10	<10	0	0	<10

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MA- TERIAL (UG/G)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MA- TERIAL (UG/G)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MA- TERIAL (UG/G)
OCT , 1975											
23...	310	0	<10	0	80	<.5	<.5	0	0	0	<10

PESTICIDE ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL PCB (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLOR- DANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DI- AZINON (UG/L)	TOTAL DI- ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)
OCT , 1975												
23...	1415	.36	.0	.00	.0	.00	.00	.00	.00	.00	.00	.00

DATE	TOTAL HEPTA- CHLOR (UG/L)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL METHYL TRI- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL TOX- APHENE (UG/L)	TOTAL TRI- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
OCT , 1975												
23...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

05400910 - FIVEMILE CREEK NEAR KELLNER, WIS.

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM
OCT , 1975											
23...	1030	.03	160	6.9	13.5	77	9	18	7.7	2.3	6
NOV											
14...	1045	.09	165	--	.5	--	--	--	--	--	--
DEC											
22...	1415	.05	50	7.0	.5	--	--	--	--	--	--

DATE	SODIUM AOSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT , 1975											
23...	.1	.7	83	0	68	17	8.0	3.0	1.0	16	99
NOV											
14...	--	.7	72	--	59	--	--	--	--	--	--
DEC											
22...	--	.1	56	0	46	9.0	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)
OCT , 1975											
23...	.13	.01	.03	.03	.13	.00	.00	.00	.03	.03	.0
NOV											
14...	--	--	.41	--	--	.01	--	--	.42	--	--
DEC											
22...	--	--	.33	--	--	.01	--	--	.34	--	--

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	DIS-SOLVED AMMONIA NITROGEN (N) (MG/L)	DIS-SOLVED AMMONIA (NH4) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	DIS-SOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DIS-SOLVED KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT , 1975											
23...	.06	.08	.10	.36	.31	.42	.39	8700	.45	2.0	.01
NOV											
14...	.32	--	--	.35	--	.67	--	--	1.1	4.8	.02
DEC											
22...	.15	--	--	.19	--	.34	--	--	.68	3.0	.03

DATE	DIS-SOLVED ORTHO-PHOSPHORUS (P) (MG/L)	TOTAL ORTHO-PHOSPHORUS (P) (MG/L)	DIS-SOLVED ORTHO-PHOSPHORUS (P) (MG/L)	DIS-SOLVED ORTHO-PHOSPHATE (PO4) (MG/L)	DIS-SOLVED HYDROLYZABLE PHOSPHORUS (P) (MG/L)	DIS-SOLVED ORGANIC PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS IN BOTTOM MAT. (MG/KG)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MAT. (C) (G/KG)	IN-ORGANIC CARBON IN BOTTOM MAT. (G/KG)
OCT , 1975											
23...	.02	.01	.00	.00	.00	.02	870	490	3.8	150	2.5
NOV											
14...	--	--	--	--	--	--	--	1400	--	--	--
DEC											
22...	--	--	--	--	--	--	--	1400	--	--	--

WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

05400910 - FIVEMILE CREEK NEAR KELLNER, WIS.

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	OIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MA- TERIAL (UG/G)	OIS- SOLVED BORON (B) (UG/L)	OIS- SOLVED CAO- MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL CHRO- MIUM IN BOTTOM MA- TERIAL (UG/G)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L)	OIS- SOLVED CORAL (CO) (UG/L)	TOTAL COBALT IN BOTTOM MA- TERIAL (UG/G)
OCT , 1975											
23...	1030	.03	0	33	20	0	<10	<10	0	2	<10

DATE	TIME	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MA- TERIAL (UG/G)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED GANESE (MN) (UG/L)	OIS- SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MA- TERIAL (UG/G)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MA- TERIAL (UG/G)
OCT , 1975												
23...	490	3	<10	2	230	<.5	<.5	0	0	0	0	160

PESTICIDE ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL PCR (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DOD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDF (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)
OCT , 1975												
23...	1030	.03	.0	0	.00	.0	.0	0	.00	4.3	.00	.0

DATE	TIME	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DIB- AZINON (UG/L)	DI- AZINON IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DIB- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)
OCT , 1975												
23...		.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00

DATE	TIME	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)	METHYL PARA- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL METHYL TRI- THION (UG/L)	METHYL TRI- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL PARA- THION (UG/L)
OCT , 1975											
23...		.0	.00	.0	.00	.0	.00	.0	.00	.0	.00

DATE	TIME	PARA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4,5-T (UG/L)	2,4,5-T IN BOTTOM MA- TERIAL (UG/KG)	TOTAL SILVEX (UG/L)
OCT , 1975											
23...		.0	0	0	.00	.0	.00	0	.00	0	.00

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

05401013 - NORTH BRANCH TENMILE CREEK NEAR BANCROFT, WI

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM (MG/L)
OCT , 1975											
24...	0830	2.1	420	7.4	12.5	200	93	44	22		2.1
DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED PHOSPHATASIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	
OCT , 1975											
24...	2	.1	1.1	131	0	107	8.3	14	19		.1
DATE	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE PLUS NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	
OCT , 1975											
24...	9.1	176	.24	1.00	12	.06	12	.01	.19	.20	
DATE	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOSPHORUS (P) (MG/L)	DIS-SOLVED PHOSPHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
OCT , 1975											
24...	12	54	.09	.04	.04	.01	.03	20	20	4	2.6

05401020 - TENMILE CREEK DITCH 5 NEAR BANCROFT, WI

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM
OCT , 1975											
24...	1400	7.2	340	7.5	14.5	170	44	37	18	2.0	3
NOV 14...	0945	7.0	340	--	2.0	--	--	--	--	--	--
DEC 22...	1300	--	300	7.4	4.0	--	--	--	--	--	--
DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED PHOSPHASIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT , 1975											
24...	.1	1.9	149	0	122	7.5	10	12	.1	10	193
NOV 14...	--	1.8	146	--	120	--	--	--	--	--	--
DEC 22...	--	3.7	146	0	120	9.3	--	--	--	--	--

WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

05401020 - TENMILE CREEK DITCH 5 NEAR BANCROFT, WI

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	TOTAL NITRATE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)
OCT , 1975											
24...	.26	3.75	6.0	6.3	28	.07	.07	.23	6.1	6.3	.0
NOV											
14...	--	--	6.4	--	--	.04	--	--	6.4	--	--
DEC											
22...	--	--	6.9	--	--	.04	--	--	6.9	--	--

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	DIS-SOLVED AMMONIA NITROGEN (N) (MG/L)	DIS-SOLVED AMMONIA (NH4) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	DIS-SOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	DIS-SOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT , 1975											
24...	.20	.21	.27	.32	.20	.52	.41	490	6.6	29	.03
NOV											
14...	.32	--	--	.25	--	.57	--	--	7.0	31	.10
DEC											
22...	.32	--	--	.22	--	.54	--	--	7.4	33	.04

DATE	DIS-SOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOSPHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOSPHATE (PO4) (MG/L)	DIS-SOLVED HYDROLYZABLE PHOSPHORUS (P) (MG/L)	DIS-SOLVED ORGANIC PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS IN BOTTOM MAT. (MG/KG)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MAT. TERIAL (G/KG)	IN-ORGANIC CARBON IN BOTTOM MAT. TERIAL (G/KG)
OCT , 1975											
24...	.02	.01	.01	.03	.02	.00	70	130	3.0	5.0	.0
NOV											
14...	--	--	--	--	--	--	--	130	--	--	--
DEC											
22...	--	--	--	--	--	--	--	130	--	--	--

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MAT. TERIAL (UG/G)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MAT. TERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MAT. TERIAL (UG/G)	HEXA-VALENT CHROMIUM (CR6) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)
OCT , 1975										
24...	1400	7.2	0	0	10	0	<10	<10	0	0

DATE	TOTAL COBALT IN BOTTOM MAT. TERIAL (UG/G)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MAT. TERIAL (UG/G)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (MG) (UG/L)	TOTAL MERCURY IN BOTTOM MAT. TERIAL (UG/G)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MAT. TERIAL (UG/G)
OCT , 1975									
24...	<10	130	0	<10	10	<.5	<.5	8	<10

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED
05401020 - TENMILE CREEK DITCH 5 NEAR BANCROFT, WIS.

PESTICIDE ANALYSES

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TOTAL PCB (UG/L)	PCB IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA-TERIAL (UG/KG)
OCT , 1975												
24...	1400	7.2	.0	0	.00	.0	.0	0	.00	.6	.00	.0

DATE	TOTAL DDT (UG/L)	DDT IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DIO-AZINON (UG/L)	DI-AZINON IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DIO-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ENDORIN (UG/L)	ENDORIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MA-TERIAL (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)
OCT , 1975											
24...	.00	2.9	.00	.0	.00	.0	.00	.0	.00	.0	.00

DATE	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL MALA-THION (UG/L)	METHYL PARA-THION IN ROT-TOM MA-TERIAL (UG/KG)	TOTAL METHYL TRI-THION (UG/L)	METHYL TRI-THION IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL PARA-THION (UG/L)
OCT , 1975										
24...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00

DATE	PARA-THION IN BOTTOM MA-TERIAL (UG/KG)	TOTAL TOX-APHENE (UG/L)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TRI-THION IN BOTTOM MA-TERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MA-TERIAL (UG/KG)	TOTAL 2,4,5-T (UG/L)	2,4,5-T IN BOTTOM MA-TERIAL (UG/KG)	TOTAL SILVEX (UG/L)
OCT , 1975										
24...	.0	0	0	.00	.0	.00	0	.00	0	.00

05401050 - TENMILE CREEK NEAR NEKOOSA, WI (LAT 44 15 44 LONG 089 46 38)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 1, 1975	0930	9.5	63.2	260	Mar. 26, 1976	1330	8.0	125	290
Nov. 5, 1975	1010	8.0	48.5	240	May 24, 1976	1210	12.5	77.7	290
Jan. 14, 1976	1225	0.5	46.2	250	July 8, 1976	0940	13.5	38.5	280
Feb. 20, 1976	1345	1.5	61.9	220	Aug. 20, 1976	1200	16.0	31.1	-

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
MAR , 1976					
26...	1205	8.0	125	214	72

05401100 FOURTEENMILE CREEK NEAR NEW ROME, WI (LAT 44 12 15 LONG 089 48 29)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 1, 1975	1030	14.5	39.0	300	Mar. 26, 1976	1310	5.5	105	280
Nov. 5, 1975	1130	11.5	38.5	300	May 24, 1976	1400	17.0	56.3	300
Jan. 14, 1976	1040	3.0	42.8	220	July 8, 1976	1105	22.5	14.4	330
Feb. 20, 1976	1435	3.5	23.0	300	Aug. 20, 1976	1005	24.0	9.9	260

WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

05401535 BIG ROCHE A CRI CREEK NEAR ADAMS, WI (LAT 44 05 52 LONG 089 46 30)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 1, 1975	1125	11.5	70.1	225	May 24, 1976	-	14.5	69.4	250
Nov. 5, 1975	1255	10.0	54.9	240	July 8, 1976	-	17.0	39.3	260
Jan. 13, 1976	-	0.5	51.1	240	Aug. 19, 1976	1540	18.0	34.4	240
Feb. 20, 1976	-	5.0	65	220					

05402000 YELLOW RIVER AT BABCOCK, WI (LAT 44 18 05 LONG 090 07 15)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Jan. 14, 1976	1600	0.0	19.8	90	May 24, 1976	1625	19.5	67.1	100
Feb. 20, 1976	1155	0.0	95.5	180	July 8, 1976	1515	21.0	5.38	140
Mar. 22, 1976	1335	1.5	4,260	100	Aug. 26, 1976	1100	22.0	5.96	110

05403500 LEMONWEIR RIVER AT NEW LISBON, WI (LAT 43 52 47 LONG 090 09 40)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Jan. 15, 1976	1035	0.5	214	-	June 15, 1976	1405	23.5	112	140
Feb. 17, 1976	1105	0.5	501	125	July 15, 1976	1310	25.0	67.8	170
Apr. 1, 1976	0850	4.5	1,640	90	Sept. 1, 1976	-	20.5	47.2	155
May 7, 1976	1215	13.0	538	105					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
APR 1976	01...	0900	4.5	1640	12 53

05403630 - MULBERT CREEK NEAR WISCONSIN DELLS, WI (LAT 43 37 37 LONG 089 49 36)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 28, 1975	1315	9.5	3.7	120	May 6, 1976	1420	15.0	5.1	95
Dec. 3, 1975	1415	0.5	4.0	-	June 11, 1976	1245	24.5	2.9	120
Jan. 16, 1976	1430	1.0	3.9	70	July 14, 1976	1640	27.5	2.9	100
Feb. 27, 1976	1130	5.0	5.3	115	Aug. 9, 1976	1400	20.5	3.1	-
Mar. 31, 1976	1420	5.0	7.6	85	Sept. 2, 1976	0750	17.0	2.7	90

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT 1975	28...	1315	9.5	3.7	6 .08	MAY 1976	06...	1335	--	5.1	7 .10
JAN 1976	16...	1345	1.0	3.9	6 .06	JUN 11...	1245	24.5	2.9	1 .01	
FEB 27...	1130	5.0	5.3	6 .09	JUL 14...	1640	27.5	2.9	4 .03		
MAR 31...	1425	5.0	8.1	10 .22	SEP 02...	0745	17.0	2.7	10 .07		

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

05403700 DELL CREEK NEAR LAKE DELTON, WI (LAT 43 33 05 LONG 089 51 55)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Nov. 26, 1975	1230	0.5	21.3	-	May 27, 1976	1430	15.5	26.2	195
Jan. 16, 1976	1245	1.0	22.4	-	June 14, 1976	1400	17.5	26.6	260
Feb. 27, 1976	1255	5.0	31.7	165	July 15, 1976	1555	18.5	25.8	200
Mar. 31, 1976	1150	4.5	78.6	150					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
MAR , 1976					
31...	1200	4.5	42	11	1.2

05404000 WISCONSIN RIVER NEAR WISCONSIN DELLS, WI (LAT 43 36 22 LONG 089 45 25)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Mar. 29, 1976	1445	5.5	24,300	165	July 14, 1976	1215	26.5	3,780	155
May 7, 1976	1620	10.0	9,380	100	Sept. 2, 1976	1135	21.5	2,870	180
June 18, 1976	1215	19.0	5,210	155					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
MAR , 1976					
29...	1510	5.5	24300	20	1310

05405000 BARABOO RIVER NEAR BARABOO, WI (LAT 43 28 51 LONG 089 38 09)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 29, 1975	1025	9.5	224	-	May 6, 1976	1115	12.5	397	305
Nov. 25, 1975	1145	3.5	234	-	June 17, 1976	0935	19.0	194	340
Jan. 29, 1976	1155	1.0	178	-	July 13, 1976	1350	24.0	168	325
Feb. 27, 1976	1700	2.5	443	320	Sept. 3, 1976	1135	19.5	162	360
Mar. 26, 1976	1730	5.5	1,330	185					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
MAR , 1976					
26...	1745	5.5	1330	131	470

WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

432451089171101 - MUD LAKE SITE 1 NEAR RIO, WI (LAT 43 24 51 LONG 089 17 11.01)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- CAL- CIUM (CA) (MG/L)
NOV , 1975										
19...	1030	550	7.3	9.0	21	--	--	260	0	51
FEB , 1976										
25...	1500	605	6.6	6.0	23	4.0	34	290	13	60
MAY										
18...	1430	280	7.5	20.0	33	8.5	98	150	4	31

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
NOV , 1975										
19...	31	4.3	3	.1	3.1	316	0	259	25	5.1
FEB , 1976										
25...	35	4.0	3	.1	3.0	343	0	281	87	5.7
MAY										
18...	18	1.4	2	.1	2.0	180	0	148	9.1	3.8

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)
NOV , 1975										
19...	9.1	.1	9.6	293	269	.40	.03	.13	.01	.03
FEB , 1976										
25...	9.1	.1	6.8	302	296	.41	.02	.09	.07	.23
MAY										
18...	3.2	.1	1.3	172	150	.23	.01	.04	.01	.03

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L)
NOV , 1975									
19...	.04	--	--	.93	.05	.15	80	110	10
FEB , 1976									
25...	.89	--	--	1.4	.07	.21	100	640	24
MAY									
18...	.02	.22	.98	1.2	.07	.21	260	20	13

05405500 - ROCKY RUN CREEK NEAR POYNETTE, WI (LAT 43 25 38 LONG 089 16 37)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
FEB , 1976										
25...	1600	6.5	540	7.0	.5	32	2.5	18	250	10

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
FEB , 1976										
25...	49	30	2.9	2	.1	2.7	288	0	236	46

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

05405500 - ROCKY RUN CREEK NEAR POYNETTE, WI (LAT 43 25 38 LONG 089 16 37)

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (NO3) (MG/L)
FEB , 1976										
25...	14	7.2	.2	9.7	263	260	.36	4.62	.45	2.0

DATE	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
FEB , 1976									
25...	.05	.16	.50	1.2	.07	.21	180	140	15

05406078 - WI RIVER FERRY BLUFF SITE 3 NEAR SAUK CITY, WI (LAT 43 14 26 LONG 089 48 17)

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)
FEB , 1976										
26...	1100	230	6.6	2.0	60	7.5	57	81	15	19
MAY 19...	0900	140	7.5	16.0	44	8.5	89	60	13	13

DATE	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
FEB , 1976										
26...	8.1	6.4	14	.3	2.4	80	0	66	32	17
MAY 19...	6.6	3.3	10	.2	1.9	57	0	47	2.9	10

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
FEB , 1976										
26...	10	.2	1.1	127	117	.17	.66	2.9	.01	.03
MAY 19...	5.0	.1	.1	80	69	.11	.01	.04	.01	.03

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
FEB , 1976									
26...	.67	--	--	.85	.11	.34	480	90	13
MAY 19...	.02	.01	.89	.90	.00	.25	390	0	10

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

05406310 - WI RIVER FERRY BLUFF SITE 2 NEAR SAUK CITY, WI (LAT 43 14 32 LONG 089 48 23)

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	HARDNESS (CA, MG)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)
FEB , 1976										
26...	1030	310	6.9	3.0	15	6.0	62	110	26	26
MAY										
19...	0930	210	7.3	14.5	9	6.0	61	95	21	20

DATE	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
FEB , 1976										
26...	12	4.3	7	.2	2.6	108	0	69	22	15
MAY										
19...	11	3.0	6	.1	1.4	90	0	74	7.2	15

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
FEB , 1976										
26...	9.0	.1	10	141	142	.19	2.2	9.6	.03	.10
MAY										
19...	5.6	.1	9.5	117	116	.16	1.4	6.1	.03	.10

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
FEB , 1976									
26...	2.2	--	--	.48	.11	.34	160	100	9.2
MAY									
19...	1.4	.05	.53	.56	.11	.34	70	100	3.5

05406313 - WI RIVER FERRY BLUFF SITE 1 NEAR SAUK CITY, WI (LAT 43 14 29 LONG 089 48 35)

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	HARDNESS (CA, MG)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)
FEB , 1976										
26...	1230	460	7.2	4.0	18	5.0	40	190	15	42
MAY										
19...	1100	410	7.6	14.5	6	6.0	82	210	15	45

DATE	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
FEB , 1976										
26...	21	3.9	4	.1	4.1	215	0	176	22	16
MAY										
19...	24	2.8	3	.1	2.1	239	0	196	9.6	12

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

05406313 - WI RIVER FERRY BLUFF SITE 1 NEAR SAUK CITY, WI (LAT 43 14 29 LONG 089 48 35)

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
FEB , 1976										
26...	8.5	.2	11	219	219	.30	1.4	6.2	.01	.03
MAY										
19...	5.1	.1	9.4	225	223	.31	.96	4.3	.03	.10

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
FEB , 1976									
26...	1.4	--	--	1.2	.27	.83	90	110	13
MAY									
19...	.99	.07	.58	.65	.15	.46	50	40	5.4

430349089361801 - BRANDABUR POND NEAR CROSS PLAINS, WI (LAT 43 03 49 LONG 089 36 18.01)

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)
MAR , 1976										
17...	1300	92	6.5	.5	63	8.0	58	41	14	8.2
MAY										
19...	1600	270	7.1	18.5	37	6.0	67	120	20	23

DATE	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	RICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
MAR , 1976										
17...	5.1	1.5	6	.1	6.0	34	0	28	17	9.4
MAY										
19...	14	6.6	10	.3	8.5	116	0	95	15	9.3

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS PER AC-FT)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
MAR , 1976										
17...	4.9	.2	4.7	102	61	.14	.92	4.1	.04	.13
MAY										
19...	18	.1	.6	161	138	.22	.00	.00	.01	.03

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
MAR , 1976									
17...	.96	--	--	2.2	.53	1.6	160	10	21
MAY									
19...	.01	.04	1.3	1.3	.39	1.2	320	120	14

WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

430325089361601 - COYLE POND AT STAFF GAGE NEAR CROSS PLAINS, WI (LAT 43 03 25 LONG 089 36 16.01)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNIFS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALY UNITS)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
NOV , 1975										
17...	1330	170	7.5	13.5	5	9.5	70	70	0	15
JAN , 1976										
23...	1130	400	6.4	.5	17	5.6	41	160	0	34
MAY										
19...	1830	130	9.6	21.5	18	3.0	35	52	0	11

DATE	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
NOV , 1975										
17...	8.0	1.9	5	.1	8.1	86	0	71	4.4	2.4
JAN , 1976										
23...	18	4.0	5	.1	17	202	0	166	129	1.2
MAY										
19...	6.0	1.3	4	.1	7.0	73	0	60	.0	2.4

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)
NOV , 1975										
17...	5.3	.1	.4	118	84	.16	--	--	--	--
JAN , 1976										
23...	11	.3	.6	214	187	.29	.07	.31	.00	.00
MAY										
19...	3.7	.1	.2	90	68	.12	.00	.00	.01	.03

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (P) (MG/L)	DIS- SOLVED IRON (FE) (MG/L)	DIS- SOLVED MAN- GANESE (MN) (MG/L)	DIS- SOLVED ORGANIC CARBON (C) (MG/L)
NOV , 1975									
17...	--	--	--	2.5	.30	.92	0	10	15
JAN , 1976									
23...	.07	--	--	3.7	.27	.83	10	930	22
MAY									
19...	.01	.01	1.8	1.8	.24	.74	50	10	12

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Jan. 23, 1976	1130	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		Ankistrodesmus		0	
		Dictyosphaerium	95,000	98	
		Scenedesmus		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Cyclotella		0	
		Navicula		0	
		Nitzschia		0	
		EUGLENOPHYTA			
		Cryptophyceae			
		Cryptomonas	950	1	
		Euglenophyceae			
		Euglena		0	
		Phacus		0	
		Trachelomonas		0	
		PYRRHOPHYTA			
		Dinophyceae			
		Gymnodinium		0	
		Peridinium		0	
		TOTAL	97,000		

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

WISCONSIN RIVER BASIN--CONTINUED

05410000 - KICKAPOO RIVER AT GAYS MILLS, WI (LAT 43 19 10 LONG 090 51 08)

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT CHARGE (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT CHARGE (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
OCT , 1975						JUN , 1976					
27...	1410	9.0	322	8	7.0	01...	1410	17.0	401	34	37
DEC						JUL					
01...	1500	--	739	195	389	06...	1500	21.0	283	51	39
APR , 1976						SEP					
26...	1625	11.0	1310	178	630	07...	1400	--	255	60	41

05410500 KICKAPOO RIVER AT STEUBEN, WI (LAT 43 11 27 LONG 090 52 28)

Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance	Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance
Oct. 27, 1975	1045	5.0	423	480	Apr. 26, 1976	1200	10.0	1,240	380
Dec. 1, 1975	1130	0.5	681	445	June 1, 1976	1050	17.0	509	450
Feb. 9, 1976	1155	0.0	379	285	July 6, 1976	1145	21.0	366	430

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT CHARGE (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
AUG , 1976				
04...	1345	354	90	86

GRANT RIVER BASIN

05413500 GRANT RIVER AT BURTON, WI (LAT 42 43 13 LONG 090 49 09)

Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance	Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance
Oct. 7, 1975	1500	18.0	117	-	Mar. 3, 1976	1345	2.0	144	-
Oct. 28, 1975	0940	9.0	114	590	Mar. 18, 1976	1250	5.0	161	580
Nov. 18, 1975	0910	9.0	120	-	Apr. 6, 1976	1445	20.5	144	-
Dec. 2, 1975	1025	0.0	143	540	Apr. 30, 1976	0930	11.0	217	550
Feb. 3, 1976	1400	0.5	95.8	-	July 7, 1976	1020	23.0	95.4	-
Feb. 10, 1976	1110	-	117	590	Aug. 5, 1976	0900	19.5	118	510

PLATTE RIVER BASIN

05414000 PLATTE RIVER NEAR ROCKVILLE, WI (LAT 42 43 52 LONG 090 38 25)

Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance	Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance
Oct. 7, 1975	1415	16.0	72.4	-	Mar. 18, 1976	1530	7.5	97.4	520
Oct. 28, 1975	1215	10.0	70.4	640	Apr. 6, 1976	1230	17.0	85.7	-
Nov. 18, 1975	1010	8.5	68.1	-	Apr. 27, 1976	1235	10.5	153	-
Dec. 2, 1975	1245	0.0	110	490	May 4, 1976	1200	13.0	94.6	-
Jan. 8, 1976	1625	0.0	45.7	650	June 2, 1976	1130	18.5	70.7	600
Feb. 10, 1976	1400	0.0	61.7	535	June 8, 1976	1510	21.0	59.4	-
Mar. 3, 1976	1710	2.0	87.5	-	Aug. 5, 1976	1210	21.5	55.5	550

GALENA RIVER BASIN

05415000 GALENA RIVER AT BUNCOMBE, WI (LAT 42 30 49 LONG 090 22 40)

Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance	Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance
Dec. 3, 1975	0945	0.0	42.8	600	June 3, 1976	0945	18.5	37.7	800
Feb. 11, 1976	1100	-	45.0	830	July 8, 1976	0930	22.5	28.3	750
Mar. 16, 1976	0805	2.0	65.6	750	Aug. 6, 1976	0920	20.5	24.7	810
Apr. 30, 1976	1230	11.0	70.3	745	Sept. 9, 1976	0940	6.5	17.8	-

WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

ROCK RIVER BASIN

05426000 CRAWFISH RIVER AT MILFORD, WI (LAT 43 06 00 LONG 088 50 58)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
July 8, 1976	1510	28.5	40.4	690	Aug. 26, 1976	1130	22.0	63.2	620
July 29, 1976	1350	26.0	59.3	585					

430147088583601 - STOCKFISH BOG NEAR LAKE RIPLEY, WI (LAT 43 01 47 LONG 088 58 36.01)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARO-NESS (CA, MG)	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
FEB , 1976										
27...	1530	90	5.2	5.5	460	13	7	3.8	.9	.4
JUN										
01...	1430	91	5.5	12.0	660	17	17	5.0	1.2	.4

DATE	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
FEB , 1976									
27...	6	.0	.5	8	0	7	81	19	2.6
JUN									
01...	5	.0	.3	0	0	0	.0	22	5.9

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS PER AC-FT) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
FEB , 1976									
27...	.4	13	141	46	.19	.11	.49	.01	.03
JUN									
01...	.0	15	220	52	.30	.16	.71	.03	.10

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
FEB , 1976									
27...	.12	--	--	14	.31	.95	610	10	80
JUN									
01...	.19	3.7	20	24	.44	1.4	880	10	79

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

ROCK RIVER BASIN--CONTINUED

430140088584701 - HOPE LAKE NEAR LAKE RIPLEY, WI (LAT 43 01 40 LONG 088 58 47.01)

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)
NOV , 1975										
18...	1500	375	7.5	13.0	7	--	--	210	38	48
FEB , 1976										
27...	1030	460	7.2	7.0	15	15.0	129	190	7	43
JUN										
01...	1300	319	7.8	19.5	12	6.5	74	160	4	34

DATE	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
NOV , 1975										
18...	23	3.8	4	.1	5.9	215	0	176	11	15
FEB , 1976										
27...	21	4.3	4	.1	6.2	228	0	187	23	16
JUN										
01...	17	3.1	4	.1	5.3	184	0	151	4.7	11

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS PER AC-FT	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO2) (MG/L)
NOV , 1975										
18...	8.8	.1	11	251	222	.34	--	--	--	--
FEB , 1976										
27...	8.2	.0	2.2	248	214	.34	.07	.31	.01	.03
JUN										
01...	7.8	.1	.9	228	170	.31	.00	.00	.01	.03

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
NOV , 1975									
18...	--	--	--	1.9	.13	.40	30	30	18
FEB , 1976									
27...	.08	--	--	2.5	.15	.46	10	20	18
JUN									
01...	.01	.04	.89	.93	.04	.12	30	0	23

430140088584601 - HOPE LAKE MARSH NEAR LAKE RIPLEY, WI (LAT 43 01 40 LONG 088 58 46.01)

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)
NOV , 1975										
18...	1530	445	7.0	10.5	14	210	19	45	24	4.2
FEB , 1976										
27...	0930	170	6.2	2.0	29	56	5	13	5.6	1.4
JUN										
01...	1200	330	8.5	19.5	38	190	1	39	22	2.8

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

ROCK RIVER BASIN--CONTINUED

430140088584601 - HOPE LAKE MARSH NEAR LAKE RIPLEY, WI (LAT 43 01 40 LONG 088 58 46.01)

DATE	PERCENT SODIUM RATIO	SODIUM AD- SORP- TION RATIO	OIS- SOLVED PO- TA- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINIT- AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	OIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
NOV , 1975 18...	4	E.1	6.8	234	0	192	37	11	10	.0
FEB , 1976 27...	5	.1	4.0	62	0	51	63	8.9	2.9	.1
JUN 01...	3	.1	4.1	228	0	187	1.2	4.7	6.7	.1

DATE	OIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TOMS PER AC-FT)	DIS- SOLVED SOLIDS (TOMS PER DAY)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	OIS- SOLVED NITRITE (NO2) (MG/L)
NOV , 1975 18...	8.1	272	225	.37	.00	.00	.00	.00	.00
FEB , 1976 27...	2.9	80	70	.11	--	.13	.58	.03	.10
JUN 01...	.8	233	193	.32	--	.01	.04	.01	.03

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED IRON (FE) (MG/L)	DIS- SOLVED MAN- GANESE (MN) (MG/L)	OIS- SOL- VED ORGANIC CARBON (C) (MG/L)
NOV , 1975 18...	.00	--	--	3.5	.19	.58	30	110	20
FEB , 1976 27...	.16	--	--	.51	.30	.92	140	100	15
JUN 01...	.02	.28	2.9	3.2	.24	.74	140	50	24

05427270 - KDSHKDNONG CR 3.68M DS FR STP AT SUN PRAIRIE, WI (LAT 43 08 58 LONG 089 14 13)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
AUG , 1976 19...	0607	1700	7.9	19.0	.06	.03	.09

DATE	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (NO3) (MG/L)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L)	SUS- PENDED ORGANIC CARBON (C) (MG/L)
AUG , 1976 19...	17	.00	17	17	76	15	1.8

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

ROCK RIVER BASIN--CONTINUED

05427271 - KOSHKONONG CREEK AT FARM OR NEAR SUN PRAIRIE, WI (LAT 43 08 52 LONG 089 13 28)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L)	SUS- PENDED ORGANIC CARBON (C) (MG/L)
AUG , 1976 19...	0752	1700	7.8	18.0	.03	17	.00	17	12	1.8

05427275 - KOSHKONONG CREEK AT CTH T NEAR SUN PRAIRIE, WI (LAT 43 08 31 LONG 089 12 47)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
AUG , 1976 19...	1127	1700	7.7	24.0	.04	.04	.08

DATE	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L)	SUS- PENDED ORGANIC CARBON (C) (MG/L)
AUG , 1976 19...	17	.00	17	17	76	10	1.9

05427278 - KOSHKONONG CREEK AT CTH N NEAR COTTAGE GROVE, WI (LAT 43 07 35 LONG 089 11 53)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
AUG , 1976 19...	1300	1700	7.6	24.5	.91	.69	1.6

DATE	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L)	SUS- PENDED ORGANIC CARBON (C) (MG/L)
AUG , 1976 19...	12	1.0	13	15	65	12	2.0

05427283 - KOSHKONONG CREEK AT CTH TT NR COTTAGE GROVE, WI (LAT 43 06 55 LONG 089 10 50)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
AUG , 1976 19...	1420	1550	7.9	23.5	1.6	.91	2.5

DATE	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L)	SUS- PENDED ORGANIC CARBON (C) (MG/L)
AUG , 1976 19...	8.9	.80	9.7	12	54	17	2.2

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

ROCK RIVER BASIN--CONTINUED

430113089320101 - MORSE POND INLET NEAR VERONA, WI (LAT 43 01 13 LDNG 089 32 01.01)

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)
NOV , 1975										
17...	1430	155	7.5	10.0	14	10.0	93	61	10	14
JAN , 1976										
23...	1105	265	9.3	.5	65	24.0	173	87	0	19
MAY										
31...	1200	140	9.5	20.5	16	6.0	70	54	4	11

DATE	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
NOV , 1975										
17...	6.3	4.4	12	.2	6.5	62	0	51	3.1	6.0
JAN , 1976										
23...	9.7	7.9	15	.4	11	90	11	92	.1	8.0
MAY										
31...	6.4	5.5	16	.3	5.7	61	0	50	.0	5.8

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (ND2) (MG/L)
NOV , 1975										
17...	9.5	.0	3.3	130	81	.18	--	--	--	--
JAN , 1976										
23...	16	.2	1.3	169	130	.23	.43	1.9	.01	.03
MAY										
31...	11	.1	.2	91	76	.12	.03	.13	.00	.00

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)
NOV , 1975									
17...	--	--	--	7.2	.39	1.2	0	3	30
JAN , 1976									
23...	.44	--	--	4.9	.20	.61	10	10	27
MAY									
31...	.03	.01	2.5	2.5	.16	.49	40	0	15

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

ROCK RIVER BASIN--CONTINUED

430113089320101 - MORSE POND INLET NEAR VERDNA, WI (LAT 43 01 13 LONG 089 32 01.01)

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Jan. 23, 1976	1130	CHLOROPHYTA			Grab sample
		Chlorophyceae			
		Actinastrum		0	
		Ankistrodesmus	5,100	3	
		Chlorogonium	61,000	34	
		Crucigenia		0	
		Dictyosphaerium	4,000	2	
		Golenkia	1,000	1	
		Kirchneriella	14,000	8	
		Micractinium	5,100	3	
		Oocystis		0	
		Scenedesmus	28,000	16	
		Tetraedron		0	
		Tetrastrum		0	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Cyclotella	14,000	8	
		Nitzschia	4,000	2	
		CYANOPHYTA			
		Myxophyceae			
		Anacystis	21,000	12	
		Aphanizomenon		0	
		Gomphosphaeria	10,000	6	
		Oscillatoria	10,000	6	
		EUGLENOPHYTA			
		Euglenophyceae			
		Trachelomonas		0	
		PYRRHOPHYTA			
		Dinophyceae			
		Glenodinium	1,000	1	
		TOTAL	180,000		

05431500 TURTLE CREEK NEAR CLINTON, WI (LAT 42 35 47 LONG 088 51 50)

Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance	Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance
Oct. 23, 1975	1315	15.5	87.8	-	May 10, 1976	1130	15.0	149	650
Dec. 2, 1975	1415	1.0	219	-	Aug. 3, 1976	1305	22.0	57.9	650
Jan. 6, 1976	1225	0.0	77.1	700	Sept. 10, 1976	1445	19.5	59.4	660
Mar. 24, 1976	1340	10.5	127	650					

05433000 EAST BRANCH PECATONICA RIVER NEAR BLANCHARDVILLE, WI (LAT 42 47 10 LONG 089 51 40)

Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance	Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance
Oct. 31, 1975	1215	7.0	93.5	520	Mar. 19, 1976	1310	6.0	176	500
Dec. 4, 1975	1025	0.0	102	450	Apr. 29, 1976	1035	10.5	170	380
Jan. 14, 1976	1135	0.0	84.3	230	June 4, 1976	1100	18.5	102	540
Feb. 12, 1976	1400	0.0	113	500	July 12, 1976	1105	22.0	77.7	-

05434500 PECATONICA RIVER AT MARTINTOWN, WI (LAT 42 30 34 LONG 089 47 58)

Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance	Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance
Oct. 30, 1975	1400	7.0	384	790	Apr. 28, 1976	1025	10.0	863	-
Dec. 4, 1975	1530	0.0	484	470	May 31, 1976	0940		433	560
Jan. 13, 1976	1350	0.0	313	480	July 9, 1976	1050	22.0	305	570
Mar. 16, 1976	1250	4.5	1,800	420					

WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

ROCK RIVER BASIN--CONTINUED

05436500 SUGAR RIVER NEAR BRODHEAD, WI (LAT 42 36 42 LONG 089 23 53)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Oct. 30, 1975	1030	8.5	237	480	Apr. 28, 1976	1350	10.5	457	480
Dec. 5, 1975	1100	2.5	296	480	May 31, 1976	1220	18.5	282	520
Jan. 13, 1976	-	0.0	194	600	July 9, 1976	1355	26.0	197	530
Feb. 13, 1976	1135	0.0	298	540	July 27, 1976	1015	29.5	143	-
Mar. 15, 1976	1255	4.5	1,310	-	Aug. 2, 1976	1430	27.0	178	430

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
MAR , 1976					
15...	1305	4.5	1310	84	297

ILLINOIS RIVER BASIN

05543830 FOX RIVER AT WAUKESHA, WI (LAT 43 00 17 LONG 088 14 37)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Jan. 1, 1976	1405	0.0	40.6	955	June 18, 1976	0950	13.0	61.3	805
Apr. 6, 1976	1330	11.0	173	860	July 23, 1976	1125	16.0	21.1	1,180
May 5, 1976	1100	12.0	157	790	Aug. 27, 1976	1010	22.0	19.4	800

05544200 MUKWONAGO RIVER AT MUKWONAGO, WI (LAT 42 51 24 LONG 088 19 40)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Nov. 5, 1975	1115	10.0	53.2	580	May 5, 1976	1410	13.5	69.6	440
Jan. 21, 1976	1120	1.0	32.3	650	June 10, 1976	1040	25.0	10.6	360
Feb. 25, 1976	1500	1.0	104	520	July 9, 1976	1430	26.0	20.1	380
Mar. 6, 1976	1650	3.0	214	360	Aug. 24, 1976	1110	23.5	22.9	460
Mar. 31, 1976	1530	8.5	117	450					

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
MAR , 1976				
06...	1720	214	6	3.5

05545300 WHITE RIVER NEAR BURLINGTON, WI (LAT 42 39 57 LONG 088 19 03)

Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Dis-charge (cfs)	Specific conductance
Nov. 8, 1975	1015	6.5	22.1	660	June 9, 1976	1120	23.0	62.6	520
Jan. 13, 1976	1540	0.0	28.5	675	July 20, 1976	1225	16.0	18.8	740
Feb. 27, 1976	1300	6.5	156	540	Aug. 20, 1976	1145	21.5	14.7	700
Apr. 29, 1976	1455	13.0	248	540	Sept. 22, 1976	1205	11.5	12.3	800

MISCELLANEOUS WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

ILLINOIS RIVER BASIN--CONTINUED

05546500 FOX RIVER AT WILMOT, WI (LAT 42 30 40 LONG 088 10 45)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Apr. 27, 1976	1730	9.0	2,220	580	May 4, 1976	1230	13.5	1,120	620

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
MAR , 1976				
16...	1230	2090	22	124

FIGURE 7. LOCATION OF OBSERVATION WELLS IN WISCONSIN

1976 WATER YEAR



ADAMS COUNTY

435759089490001. LOCAL NUMBER, AD-17/06E/08-0076.
 LOCATION.--LAT 43°57'59", LONG 89°49'00", HYDROLOGIC UNIT 07070003. OWNER: WIS. DEPT. OF NATURAL RESOURCES.
 AQUIFER.--SAND OF PLEISTOCENE AGE.
 WELL CHARACTERISTICS.--DRIVEN OBSERVATION WATER TABLE WELL, DIAMETER 1 1/4 IN (0.03 M), DEPTH 21 FT (6.4 M),
 CASED TO 19 FT (5.8 M), WELL POINT 19-21 FT (5.8-6.4 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 955 FT (291 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING,
 1.50 FT (0.46 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--SEPTEMBER 1969 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 9.69 FT (2.95 M) BELOW LAND-SURFACE DATUM,
 MAY 29, 1973; LOWEST WATER LEVEL MEASURED, 17.08 FT (5.21 M) BELOW LAND-SURFACE DATUM, DEC. 13, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL										
OCT 22	14.75	DEC 29	15.03	FEB 16	15.74	APR 5	13.70	JUN 28	14.24	AUG 23	15.50
NOV 17	15.05	JAN 26	15.66	MAR 15	15.36	MAY 24	12.90	JUL 27	15.26	SEP 30	16.19

ASHLAND COUNTY

460936090531701. LOCAL NUMBER, AS-43/04W/32-0006.
 LOCATION.--LAT 46°09'36", LONG 90°53'17", HYDROLOGIC UNIT 07050001. OWNER: U.S. FOREST SERVICE.
 AQUIFER.--SAND AND GRAVEL OF PLEISTOCENE AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED WATER-TABLE WELL, DIAMETER 5 IN (0.13 M), DEPTH 89 FT (27 M).
 DATUM.--ALTITUDE OF LAND-SURFACE DATUM IS 1,470 FT (448 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF HOLE
 IN PUMP BASE, AT LAND-SURFACE DATUM.
 PERIOD OF RECORD.--AUGUST 1957 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 26.0 FT (7.9 M) BELOW LAND-SURFACE DATUM,
 NOV. 3, 1972; LOWEST WATER LEVEL MEASURED, 32.35 FT (9.86 M) BELOW LAND-SURFACE DATUM, APR. 1, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL										
OCT 1	28.40	DEC 1	28.70	FEB 1	29.40	APR 5	29.60	JUL 6	28.30	SEP 8	29.80
NOV 1	28.60	JAN 1	28.70	MAR 5	29.50	MAY 5	29.60				

BARRON COUNTY

451514091582101. LOCAL NUMBER, BR-33/13W/21-0046.
 LOCATION.--LAT 45°15'14", LONG 91°56'21", HYDROLOGIC UNIT 07050007. OWNER: EDWARD THUFTIN.
 AQUIFER.--SANDSTONE OF CAMBRIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED WATER-TABLE WELL, DIAMETER 4 IN (0.10 M), DEPTH 65 FT (19.8 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 1,115 FT (340 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING,
 2.00 FT (0.60 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--OCTOBER 1956 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 27.58 FT (8.41 M) BELOW LAND-SURFACE DATUM,
 MAY 25, 1976; LOWEST WATER LEVEL MEASURED, 35.45 FT (10.81 M) BELOW LAND-SURFACE DATUM, MAY 13, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	28.46	JAN 7	28.65	MAR 19	28.34	MAY 25	27.58	JUL 6	27.76	AUG 18	28.10
NOV 3	28.50	FEB 10	28.56	APR 28	27.80						

BROWN COUNTY

443228088003101. LOCAL NUMBER, BN-24/20E/24-0076.
 LOCATION.--LAT 44°32'28", LONG 88°00'31", HYDROLOGIC UNIT 04030204. OWNER: WISCONSIN PUBLIC SERVICE CORP.
 AQUIFER.--SANDSTONE OF CAMBRIAN; ST. PETER SANDSTONE OF ORDOVICIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED ARTESIAN WELL, DIAMETER 5 IN (0.13 M), DEPTH 500 FT (152 M), CASED TO
 150 FT (45.7 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 590 FT (180 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF 3 IN PIPE,
 4.00 FT (1.21 M) ABOVE LAND-SURFACE DATUM.
 REMARKS.--WATER LEVEL AFFECTED BY CESSATION OF PUMPING GREEN BAY MUNICIPAL WELLS AND BY PUMPING OF NEARBY WELLS.
 PERIOD OF RECORD.--APRIL 1950 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 41.24 FT (12.6 M) BELOW LAND-SURFACE DATUM,
 MAY 3, 1961; LOWEST WATER LEVEL MEASURED, 248.97 FT (75.9 M) BELOW LAND-SURFACE DATUM, AUG. 30, 1955.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL										
OCT 23	69.78	DEC 18	85.17	FEB 26	73.33	APR 27	72.68	JUN 23	78.61	AUG 25	106.45
NOV 20	86.39	JAN 22	78.22	MAR 24	74.36	MAY 27	73.87	JUL 28	110.76	SEP 22	103.14

GROUND-WATER LEVELS

BURNETT COUNTY

455224092215601. LOCAL NUMBER, BT-39/16W/17-0002.
 LOCATION.--LAT 45°52'24", LONG 92°21'56", HYDROLOGIC UNIT 07030001. OWNER: WIS. DEPT. OF NATURAL RESOURCES.
 AQUIFER.--SAND OF PLEISTOCENE AGE.
 WELL CHARACTERISTICS.--DRILLED OBSERVATION WATER-TABLE WELL, DIAMETER 8 IN (0.20 M), DEPTH 46 FT (14.0 M), CASED TO 46 FT (14.0 M); PERFORATED 44 1/2-46 FT (13.6-14.0 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 981 FT (299 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: POINTER ON FLOAT GAGE, 4.87 FT (1.48 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--MAY 1937 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 30.33 FT (9.24 M) BELOW LAND-SURFACE DATUM, JUNE 28, 1968; LOWEST WATER LEVEL MEASURED, 35.10 FT (10.70 M) BELOW LAND-SURFACE DATUM, MAR. 26, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL										
OCT 3	33.20	DEC 19	33.26	FEB 27	33.38	APR 9	33.25	JUN 4	33.25	AUG 20	33.30
NOV 28	33.25	JAN 23	33.31	MAR 12	33.35	MAY 28	33.24	JUL 30	33.25	SEP 24	33.37

CHIPPEWA COUNTY

445544091155701. LOCAL NUMBER, CH-28/07W/18-0142.
 LOCATION.--LAT 44°55'44", LONG 91°15'57", HYDROLOGIC UNIT 07050005. OWNER: WIS. DEPT. OF TRANSPORTATION.
 AQUIFER.--SANDSTONE OF CAMBRIAN AGE.
 WELL CHARACTERISTICS.--DRILLED DOMESTIC ARTESIAN WELL, DIAMETER 6 IN (0.15 M), DEPTH 60 FT (18.3 M), CASED TO 39 FT (11.9 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 930 FT (284 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: 1/4 IN HOLE IN PUMP BASE, 2.20 FT (0.67 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--JANUARY 1968 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 27.72 FT (8.45 M) BELOW LAND-SURFACE DATUM, JULY 10, 1973; LOWEST WATER LEVEL MEASURED, 32.61 FT (9.94 M) BELOW LAND-SURFACE DATUM, APR. 5, 1968.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	30.99	JAN 6	30.57	MAR 24	30.74	MAY 7	30.92	JUL 8	30.67	AUG 26	30.65
NOV 13	31.23	FEB 11	31.18								

CLARK COUNTY

444525090443201. LOCAL NUMBER, CK-26/03W/04-0001.
 LOCATION.--LAT 44°45'25", LONG 90°44'32", HYDROLOGIC UNIT 07050006. OWNER: WIS. DEPT. OF NATURAL RESOURCES.
 AQUIFER.--SANDSTONE OF CAMBRIAN AGE.
 WELL CHARACTERISTICS.--DRILLED DOMESTIC ARTESIAN WELL, DIAMETER 6 IN (0.15 M), DEPTH 150 FT (45.7 M), CASED TO 53 FT (16.2 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 1,210 FT (369 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: HOLE IN PUMP BASE, AT LAND-SURFACE DATUM.
 PERIOD OF RECORD.--MAY 1953 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 55.45 FT (16.90 M) BELOW LAND-SURFACE DATUM, AUG. 16, 1973; LOWEST WATER LEVEL MEASURED, 70.64 FT (21.53 M) BELOW LAND-SURFACE DATUM, SEPT. 17, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 3	61.36	FEB 9	61.51	MAR 25	60.33	MAY 24	60.28	JUL 8	59.63	AUG 25	60.30

DANE COUNTY

430429089230301. LOCAL NUMBER, DN-07/09E/23-0005.
 LOCATION.--LAT 43°04'29", LONG 89°23'03", HYDROLOGIC UNIT 07090001. OWNER: STATE OF WISCONSIN.
 AQUIFER.--SANDSTONE OF CAMBRIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED ARTESIAN WELL, DIAMETER 8 IN (0.20 M), DEPTH 346 FT (106 M), CASED TO 265 FT (80.8 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 930 FT (284 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: HOLE IN PUMP BASE, 3.50 FT (1.07 M) BELOW LAND-SURFACE DATUM.
 REMARKS.--WATER LEVEL AFFECTED BY PUMPING OF NEARBY WELLS.
 PERIOD OF RECORD.--JULY 1946 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 83.37 FT (25.41 M) BELOW LAND-SURFACE DATUM, JAN. 2, 1961; LOWEST WATER LEVEL MEASURED, 110.79 FT (33.77 M) BELOW LAND-SURFACE DATUM, AUG. 24, 1963.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL										
OCT 28	95.02	JAN 12	94.46	MAR 16	96.87	MAY 25	96.46	JUL 20	102.18	SEP 29	100.34
DEC 9	94.98	FEB 10	97.52	APR 21	96.61	JUN 14	98.75	AUG 17	99.97		

DANE COUNTY

430818089444501. LOCAL NUMBER, ON-08/06E/26-0011.
 LOCATION.--LAT 43°08'18", LONG 89°44'45", HYDROLOGIC UNIT 07070005. OWNER: BLACK EARTH PUBLIC SCHOOL.
 AQUIFER.--SAND AND GRAVEL OF PLEISTOCENE AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED WATER TABLE WELL, DIAMETER 6 IN (0.15 M), DEPTH 59 FT (18 M), CASIED TO 59 FT (18 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 818 FT (249 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING, 6.00 FT (1.83 M) BELOW LAND-SURFACE DATUM.
 PERIOD OF RECORD.--JANUARY 1950 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL, 10.04 FT (3.06 M) BELOW LAND-SURFACE DATUM, MAY 2, 1973;
 LOWEST WATER LEVEL, 13.75 FT (4.19 M) BELOW LAND-SURFACE DATUM, AUG. 5, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
 LOWEST VALUE

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.12	13.00	12.78	13.04	13.11	11.89	12.26	12.34	12.95	13.18	13.28	13.47
10	13.11	12.99	12.89	13.02	13.15	11.98	12.50	12.57	13.01	13.24		13.51
15	13.09	13.01	12.84	13.11	13.11	11.33	12.59	12.69	13.05	13.28		13.51
20	13.09	13.05	12.94	13.11	12.94	11.84	12.37	12.62	13.08	13.28	13.45	13.35
25	13.09	13.05	13.00	13.14	12.88	12.22	11.82	12.80	13.10	13.29	13.50	13.36
EOH	13.08	12.68	13.07	13.20	12.14	11.95	12.00	12.90	13.13	13.23	13.45	13.33

WTR YEAR 1976 MAX 10.40 MAR 13, 1976 MIN 13.53 SEP 13, 1976

DODGE COUNTY

432407088552701. LOCAL NUMBER, DG-11/13E/22-0081.
 LOCATION.--LAT 43°24'07", LONG 88°55'27", HYDROLOGIC UNIT 07090002. OWNER: WIS. DEPT. OF TRANSPORTATION.
 AQUIFER.--ST. PETER SANDSTONE OF MIDDLE ORDOVICIAN AGE.
 WELL CHARACTERISTICS.--DRILLED DOMESTIC ARTESIAN WELL, DIAMETER 6 IN (0.15 M), DEPTH 125 FT (38.1 M), CASIED TO 57 FT (17.4 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 880 FT (268 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: 1/4 IN HOLE INSIDE OF CASING, 1.30 FT (0.40 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--NOVEMBER 1964 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 17.11 FT (5.22 M) BELOW LAND-SURFACE DATUM, APR. 5, 1973; LOWEST WATER LEVEL MEASURED, 26.67 FT (8.13 M) BELOW LAND-SURFACE DATUM, FEB. 3, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL										
OCT 22	22.55	JAN 9	22.20	MAR 25	20.45	MAY 28	18.89	JUL 30	22.28	SEP 24	24.71
DEC 5	21.74	FEB 12	22.41	MAY 7	17.84	JUL 1	21.04	AUG 27	23.74		

DOOR COUNTY

445757087151701. LOCAL NUMBER, DR-29/27E/30-0007.
 LOCATION.--LAT 45°57'57", LONG 87°15'17", HYDROLOGIC UNIT 04030102. OWNER: FRED PETERSON.
 AQUIFER.--NIAGARA DOLOMITE OF SILURIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED ARTESIAN WELL, DIAMETER 4 IN (0.10 M), DEPTH 111 FT (33.8 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 725 FT (221 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: HOLE IN PUMP BASE, 1.00 FT (0.30 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--JULY 1946 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 9.98 FT (3.04 M) BELOW LAND-SURFACE DATUM, MAR. 22, 1976; LOWEST WATER LEVEL MEASURED, 52.40 FT (16 M) BELOW LAND-SURFACE DATUM, DEC. 7, 1949.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL										
OCT 20	46.25	OCT 15	26.25	FEB 23	29.41	APR 26	29.42	JUN 23	46.27	AUG 23	46.29
NOV 17	46.91	JAN 21	31.10	MAR 22	9.98	MAY 26	35.12	JUL 26	46.10	SEP 20	47.03

GROUND-WATER LEVELS

DOUGLAS COUNTY

463217091342801. LOCAL NUMBER, DS-47/10W/23-0001.
 LOCATION.--LAT 46°32'17", LONG 91°34'28", HYDROLOGIC UNIT 04010301. OWNER: WIS. DEPT. OF NATURAL RESOURCES.
 AQUIFER.--SAND OF PLEISTOCENE AGE.
 WELL CHARACTERISTICS.--DRILLED OBSERVATION ARTESIAN WELL, DIAMETER 8 IN (0.20 M), DEPTH 40 FT (12.2 M), CASSED TO 40 FT (12.2 M), PERFORATED 37-40 FT (11.3-12.2 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 980 FT (299 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: POINTER ON FLOAT GAGE, 4.33 FT (1.32 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--JUNE 1937 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 0.93 FT (0.28 M) ABOVE LAND-SURFACE DATUM, JUNE 25, 1976; LOWEST WATER LEVEL MEASURED, 29.59 FT (9.02 M) BELOW LAND-SURFACE DATUM, JULY 29, 1939.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL										
OCT 31	14.33	DEC 26	2.21	FEB 27	4.70	APR 30	1.62	JUN 18	5.47	AUG 27	10.31
NOV 7	14.60	JAN 30	3.25	MAR 19	1.96	MAY 28	3.69	JUL 30	8.82	SEP 24	11.82

DUNN COUNTY

444141092004201. LOCAL NUMBER, DU-26/13W/31-0053.
 LOCATION.--LAT 44°41'41", LONG 92°00'42", HYDROLOGIC UNIT 07050005. OWNER: EAU GALLE CHEESE COMPANY.
 AQUIFER.--SANDSTONE OF CAMBRIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED WATER-TABLE WELL, DIAMETER 5 IN (0.13 M), DEPTH 75 FT (22.9 M), CASSED TO 54 FT (16.5 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 780 FT (238 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING, 6.00 FT (1.83 M) BELOW LAND-SURFACE DATUM.
 PERIOD OF RECORD.--OCTOBER 1956 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 29.81 FT (9.09 M) BELOW LAND-SURFACE DATUM, JULY 10, 1973; LOWEST WATER LEVEL MEASURED, 37.33 FT (11.38 M) BELOW LAND-SURFACE DATUM, JULY 28, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL						
OCT 6	30.02	JAN 13	31.20	MAR 25	31.39	MAY 27	31.45	JUL 2	31.38	SEP 2	32.37
NOV 11	30.64	FEB 18	31.74	MAY 4	31.56						

FOND DU LAC COUNTY

434725088255601. LOCAL NUMBER, FL-15/17E/11-0012.
 LOCATION.--LAT 43°47'25", LONG 88°25'56", HYDROLOGIC UNIT 04030203. OWNER: CITY OF FOND DU LAC.
 AQUIFER.--SANDSTONE OF CAMBRIAN AGE; ST. PETER SANDSTONE OF MIDDLE ORDOVICIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED ARTESIAN WELL, DIAMETER 4 IN (0.10 M), DEPTH 817 FT (249 M), CASSED TO 127 FT (38.7 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 753 FT (230 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING, AT LAND-SURFACE DATUM.
 REMARKS.--WATER LEVEL AFFECTED BY PUMPING OF NEARBY MUNICIPAL WELLS.
 PERIOD OF RECORD.--OCTOBER 1953 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL, 54.15 FT (16.5 M) BELOW LAND-SURFACE DATUM, FEB. 4, 1962; LOWEST WATER LEVEL, 72.36 FT (22.06 M) BELOW LAND-SURFACE DATUM, JULY 30, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
 LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	60.47	61.10	60.29	59.22	59.19	58.99	59.06	59.06		65.64	64.59	66.36
10	60.77	60.97	60.01	59.74	56.84	59.97	58.87	58.77		67.00	64.74	65.41
15		60.71	59.76	59.26	57.79	59.54	59.60			67.11	65.30	65.34
20		60.83	59.76	59.07	58.96	58.66	59.00	59.52			66.41	65.02
25	60.82	60.93	59.26	58.63	59.39	59.84	57.47	59.72			66.50	65.04
EOM	61.49	60.08	58.85	59.00	59.28	59.88	59.17	59.85		64.75	65.61	65.48
WTR YEAR 1976	MAX	55.71	MAY 2, 1976	MIN	67.24	JUL 14, 1976						

FOND DU LAC COUNTY

434650088190701. LOCAL NUMBER, FL-15/18E/11-0300.
 LOCATION.--LAT 43°46'58", LONG 88°19'07", HYDROLOGIC UNIT 04030203. OWNER: CITY OF FOND DU LAC.
 AQUIFER.--NIAGARA DOLOMITE OF SILURIAN AGE.
 WELL CHARACTERISTICS.--DRILLED OBSERVATION ARTESIAN WELL, DIAMETER 8 IN (0.20 M), DEPTH 135 FT (41.1 M), CASSED TO 16 FT (4.88 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 995 FT (303 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING, 1.00 FT (0.30 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--MAY 1956 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 0.54 FT (0.17 M) BELOW LAND-SURFACE DATUM, MAY 21, 1976; LOWEST WATER LEVEL MEASURED, 11.25 FT (3.43 M) BELOW LAND-SURFACE DATUM, SEPT. 8, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL										
OCT 22	7.00	JAN 9	6.90	APR 13	3.79	JUN 22	1.76	JUL 28	2.89	SEP 15	5.08
DEC 5	6.55	MAR 19	4.10	MAY 21	0.54						

FOREST COUNTY

460156088474901. LOCAL NUMBER, FR-41/14E/18-0002.
 LOCATION.--LAT 46°01'56", LONG 88°47'49", HYDROLOGIC UNIT 04030106. OWNER: WIS. DEPT. OF TRANSPORTATION.
 AQUIFER.--SAND AND BRAVEL OF PLEISTOCENE AGE.
 WELL CHARACTERISTICS.--DRIVEN OBSERVATION WATER-TABLE WELL, DIAMETER 1 1/4 IN (0.03 M), DEPTH 18 FT (5.5 M), CASSED TO 15 FT (4.6 M), WELL POINT 15-18 FT (4.6-5.5 M).
 DATUM.--LAND-SURFACE DATUM IS 1,551.69 FT (472.96 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING, 1.70 FT (0.52 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--OCTOBER 1948 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 7.96 FT (2.43 M) BELOW LAND-SURFACE DATUM, APR. 29, 1954; LOWEST WATER LEVEL MEASURED, 11.89 FT (3.62 M) BELOW LAND-SURFACE DATUM, AUG. 13, 1968.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 25	11.09	JAN 28	10.55	APR 6	9.63	MAY 26	10.98	AUG 3	11.69	SEP 9	11.81
DEC 23	10.70	FEB 25	10.36								

GRANT COUNTY

425551090391301. LOCAL NUMBER, GR-05/02W/06-0005.
 LOCATION.--LAT 42°55'51", LONG 90°39'13", HYDROLOGIC UNIT 07060003. OWNER: RALPH SHACKELFORD.
 AQUIFER.--DOLOMITE OF PRAIRIE DU CHIEN GROUP OF LOWER ORDOVICIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED WATER-TABLE WELL, DIAMETER 5 IN (0.13 M), DEPTH 35 FT (10.7 M), CASSED TO 5 FT (1.5 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 980 FT (299 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: EDGE OF PUMP BASE, 0.50 FT (0.15 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--JULY 1946 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 8.60 FT (2.62 M) BELOW LAND-SURFACE DATUM, MAY 22, 1973; LOWEST WATER LEVEL MEASURED, 19.03 FT (5.80 M) BELOW LAND-SURFACE DATUM, AUG. 17, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	12.83	JAN 7	13.48	APR 26	12.43	JUL 6	14.37	AUG 4	14.52	SEP 7	15.19
DEC 1	12.87	FEB 9	14.78	JUN 1	13.37						

GREEN COUNTY

423815089404201. LOCAL NUMBER, GN-02/07E/21-0001.
 LOCATION.--LAT 42°38'15", LONG 89°40'42", HYDROLOGIC UNIT 07090003. OWNER: CHARLES SENGER.
 AQUIFER.--PLATTEVILLE FORMATION OF MIDDLE ORDOVICIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED WATER-TABLE WELL, DIAMETER 6 IN (0.15 M), DEPTH 75 FT (22.9 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 995 FT (303 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING, 4.50 FT (1.37 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--JULY 1946 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 47.96 FT (14.62 M) BELOW LAND-SURFACE DATUM, APR. 13, 1966; LOWEST WATER LEVEL MEASURED, 69.72 FT (21.25 M) BELOW LAND-SURFACE DATUM, FEB. 17, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	65.64	JAN 13	63.55	APR 28	60.81	JUL 9	60.64	AUG 2	61.52	SEP 10	62.91
DEC 5	65.80	FEB 13	62.93	MAY 31	59.42						

KENOSHA COUNTY

423611087530001. LOCAL NUMBER, KE-02/22E/27-0004.
 LOCATION.--LAT 42°36'11", LONG 87°53'00", HYDROLOGIC UNIT 04040002. OWNER: SUNSET RIDGE MEMORIAL PARK.
 AQUIFER.--NIAGARA DOLOMITE OF SILURIAN AGE.
 WELL CHARACTERISTICS.--DRILLED DOMESTIC AND IRRIGATION WATER-TABLE WELL, DIAMETER 6 IN (0.15 M), DEPTH 190 FT (57.9 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 730 FT (222 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: 1/4 IN HOLE IN MANHOLE, AT LAND-SURFACE DATUM.
 REMARKS.--WATER LEVEL AFFECTED BY REGIONAL PUMPING OF WELLS.
 PERIOD OF RECORD.--JUNE 1946 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 73.70 FT (22.46 M) BELOW LAND-SURFACE DATUM, APR. 16, 1952; LOWEST WATER LEVEL, 97.35 FT (29.67 M) BELOW LAND-SURFACE DATUM, AUG. 4, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 2	89.30	FEB 27	87.94	MAR 30	86.46	MAY 4	87.36	JUN 15	91.72	SEP 23	94.11
JAN 14	88.66										

423907087521701. LOCAL NUMBER, KE-02/22E/11-0006.
 LOCATION.--LAT 42°39'07", LONG 87°52'17", HYDROLOGIC UNIT 04040002. OWNER: KENOSHA CO.
 AQUIFER.--SANDSTONE OF CAMBRIAN AGE.
 WELL CHARACTERISTICS.--DRILLED IRRIGATION ARTESIAN WELL, DIAMETER 10 IN (0.25 M), DEPTH 1,751 FT (534 M), CASED TO 492 FT (150 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 639 FT (195 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: BOTTOM OF BREATHER PIPE, 1.35 FT (0.41 M) ABOVE LAND-SURFACE DATUM.
 REMARKS.--WATER LEVEL AFFECTED BY REGIONAL PUMPING OF WELLS.
 PERIOD OF RECORD.--JULY 1946 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 21.10 FT (6.43 M) BELOW LAND-SURFACE DATUM, DEC. 3, 1947; LOWEST WATER LEVEL MEASURED, 153.36 FT (46.74 M) BELOW LAND-SURFACE DATUM, NOV. 30, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 6	147.70	MAY 7	149.30	JUN 2	149.14	JUL 21	150.90	AUG 23	152.29	SEP 23	152.69
JAN 23	147.37	27	149.64	15	149.17						

LAFAYETTE COUNTY

423113090161101. LOCAL NUMBER, LF-01/02E/33-0057.
 LOCATION.--LAT 42°31'13", LONG 90°16'11", HYDROLOGIC UNIT 07060005. OWNER: COULTHARD ESTATE.
 AQUIFER.--GALENA DOLOMITE AND PLATTEVILLE FORMATION OF MIDDLE ORDOVICIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED ARTESIAN WELL, DIAMETER 10 IN (0.25 M), DEPTH 265 FT (80.8 M), CASED TO 16 FT (4.9 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 1,000 FT (305 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING, 3.00 FT (0.91 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--APRIL 1952 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL, 63.67 FT (19.41 M) BELOW LAND-SURFACE DATUM, APR. 29, 1952; LOWEST WATER LEVEL, 130.99 FT (39.93 M) BELOW LAND-SURFACE DATUM, NOV. 6, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
 LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		97.85	98.15	98.45	98.87			99.42	99.95	100.05	100.21	100.61
10	97.54	97.85	97.90	98.42	98.83	98.85		99.41	99.58	99.95	100.24	100.64
15	97.59	97.69	98.15	98.49	98.62	99.13	99.10	99.41	99.58	100.04	100.45	100.71
20	97.47	97.49	98.48	98.60	98.82	98.76	99.25	99.55	99.93	100.10	100.43	100.54
25	97.80	98.10	98.10	98.46		99.01	99.55	99.64	99.87	100.20	100.42	100.66
EOM	97.60	98.06	98.28	98.47		99.10	99.20	99.59	99.92	100.29	100.42	100.61
WTR YEAR 1976	MAX	97.09	NOV 9, 1975		MIN	100.84	SEP 23, 1976					

GROUND-WATER LEVELS

LAFAYETTE COUNTY

423029090125601. LOCAL NUMBER, LF-01/02E/35-0121.
 LOCATION.--LAT 42°30'29", LONG 90°12'56", HYDROLOGIC UNIT 07060005. OWNER: ARTHUR HANCOCK.
 AQUIFER.--GALENA DOLOMITE OF ORDOVICIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED ARTESIAN WELL, DIAMETER 6 IN (0.15 M), DEPTH 237 FT (72.2 M), CASIED TO 20 FT (6.1 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 1,030 FT (314 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF SOUTH SIDE OF CASING, 1.00 FT (0.30 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--NOVEMBER 1953 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 56.77 FT (17.30 M) BELOW LAND-SURFACE DATUM, MAY 23, 1973; LOWEST WATER LEVEL MEASURED, 78.72 FT (23.99 M) BELOW LAND-SURFACE DATUM, APR. 14, 1957.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	65.20	JAN 9	67.62	APR 30	67.19	JUL 8	66.66	AUG 6	67.51	SEP 9	68.57
DEC 3	66.32	FEB 11	68.50	JUN 3	66.52						

424622089585701. LOCAL NUMBER, LF-04/04E/35-0078.
 LOCATION.--LAT 42°46'22", LONG 89°58'57", HYDROLOGIC UNIT 07090003. OWNER: WIS. DEPT. OF NATURAL RESOURCES.
 AQUIFER.--ST. PETER SANDSTONE OF MIDDLE ORDOVICIAN AGE.
 WELL CHARACTERISTICS.--DRILLED WELL, DIAMETER 6 IN (0.15 M), DEPTH 29 FT (8.8 M), CASIED TO 4 FT (1.2 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 850 FT (259 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING, 0.20 FT (0.06 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--MAY 1953 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 3.89 FT (1.19 M) BELOW LAND-SURFACE DATUM, MAY 23, 1974; LOWEST WATER LEVEL MEASURED, 19.81 FT (6.04 M) BELOW LAND-SURFACE DATUM, MAR. 3, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL						
OCT 31	15.29	JAN 14	16.06	APR 29	7.25	JUL 12	15.89	AUG 3	16.35	SEP 13	15.88
DEC 4	15.62	FEB 12	17.05	JUN 4	14.39						

LANGLADE COUNTY

450942089085301. LOCAL NUMBER, LA-31/11E/20-0118.
 LOCATION.--LAT 45°09'42", LONG 89°08'53", HYDROLOGIC UNIT 07070002. OWNER: WIS. PUBLIC SERVICE CORP.
 AQUIFER.--SAND OF PLEISTOCENE AGE.
 WELL CHARACTERISTICS.--DRIVEN OBSERVATION WATER-TABLE WELL, DIAMETER 1 1/2 IN (0.03 M), DEPTH 21 FT (6.4 M), CASIED TO 19 FT (5.8 M), WELL POINT 19-21 FT (5.8-6.4 M).
 DATUM.--LAND-SURFACE DATUM IS 1,510.45 FT (460.38 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING, 2.50 FT (0.76 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--AUGUST 1942 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 5.09 FT (1.55 M) BELOW LAND-SURFACE DATUM, MAY 18, 1973; LOWEST WATER LEVEL MEASURED, 13.84 FT (4.22 M) BELOW LAND-SURFACE DATUM, FEB. 28, 1949.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	10.82	JAN 5	10.75	APR 2	9.78	MAY 26	8.10	JUL 28	9.75	SEP 8	10.66
DEC 24	10.39	MAR 10	11.52								

LINCOLN COUNTY

452316089402501. LOCAL NUMBER, LN-34/06E/36-0025.
 LOCATION.--LAT 45°23'18", LONG 89°40'25", HYDROLOGIC UNIT 07070002. OWNER: U.S. GEOL. SURVEY.
 AQUIFER.--SAND AND GRAVEL OF PLEISTOCENE AGE.
 WELL CHARACTERISTICS.--DRIVEN OBSERVATION WATER-TABLE WELL, DIAMETER 1 1/4 IN (0.03 M), DEPTH 22 FT (6.7 M), CASIED TO 20 FT (6.1 M), WELL POINT 20-22 FT (6.1-6.7 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 1,435 FT (437 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF PIPE, 3.00 FT (0.91 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--NOVEMBER 1944 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 6.38 FT (1.94 M) BELOW LAND-SURFACE DATUM, MAY 15, 1960; LOWEST WATER LEVEL MEASURED, 10.18 FT (3.10 M) BELOW LAND-SURFACE DATUM, DEC. 20, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL										
OCT 3	8.94	JAN 13	8.65	APR 2	7.22	JUL 21	9.34	AUG 17	9.59	SEP 17	10.12
DEC 23	8.27	MAR 16	8.78	MAY 20	7.73	JUL 30	9.57				

MANITOWOC COUNTY

440430087420401. LOCAL NUMBER, MN-19/23E/35-0028.
 LOCATION.--LAT 44°04'30", LONG 87°42'04", HYDROLOGIC UNIT 04030101. OWNER: WIS. DEPT. OF TRANSPORTATION.
 AQUIFER.--NIAGARA DOLOMITE OF SILURIAN AGE.
 WELL CHARACTERISTICS.--DRILLED DOMESTIC ARTESIAN WELL, DIAMETER 6 IN (0.15 M), DEPTH 147 FT (44.8 M), CASIED TO 133 FT (40.5 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 670 FT (204 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: 1/4 IN HOLE IN PUMP BASE, 1.00 FT (0.30 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--JUNE 1968 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 26.86 FT (8.19 M) BELOW LAND-SURFACE DATUM, MAR. 19, 1974; LOWEST WATER LEVEL MEASURED, 31.16 FT (9.50 M) BELOW LAND-SURFACE DATUM, AUG. 18, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL										
OCT 21	28.90	JAN 8	28.84	APR 12	27.86	JUN 21	27.99	JUL 27	29.12	SEP 14	29.55
DEC 4	28.73	MAR 18	27.81	JUN 7	27.43						

MARATHON COUNTY

444114090082501. LOCAL NUMBER, MR-26/03E/33-0007.
 LOCATION.--LAT 44°41'14", LONG 90°08'25", HYDROLOGIC UNIT 07070002. OWNER: CITY OF MARSHFIELD.
 AQUIFER.--SAND AND GRAVEL OF PLEISTOCENE AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED WATER-TABLE WELL, DIAMETER 7 IN (0.18 M), DEPTH 49 FT (14.9 M), CASIED TO 30 FT (9.1 M), SCREENED 30-49 FT (9.1-14.9 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 1,190 FT (363 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING, 1.00 FT (0.30 M) ABOVE LAND-SURFACE DATUM.
 REMARKS.--WATER LEVEL AFFECTED BY PUMPING OF NEARBY WELLS.
 PERIOD OF RECORD.--JUNE 1950 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL, 16.92 FT (5.16 M) BELOW LAND-SURFACE DATUM, JUNE 12, 1950; LOWEST WATER LEVEL, 38.96 FT (11.88 M) BELOW LAND-SURFACE DATUM, JAN. 9, 1975.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
 LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	34.71	34.10		34.03	33.45	30.72	17.56		29.92		28.51	
10	34.83	33.50	24.90	33.99	33.09	30.40			29.72	29.70	28.58	28.96
15	34.53	32.26	30.17	33.81	33.01	28.76	17.50	30.68	29.73	29.46	28.73	29.05
20	34.25	29.30	30.08	33.71	32.51	20.80	17.12		29.76	29.21	28.69	29.07
25	34.01	25.29	32.87	33.60	32.47	19.87		29.97	29.65	29.00	28.70	29.10
EOB	33.91	21.40	33.84	33.60	31.50	17.62		30.32	29.81	27.78	28.81	29.08

WTR YEAR 1976 MAX 16.92 APR. 18, 1976 MIN 34.90 OCT 7, 1975

444709089265301. LOCAL NUMBER, MR-27/09E/31-0028.
 LOCATION.--LAT 44°47'09", LONG 89°26'53", HYDROLOGIC UNIT 07070002. OWNER: U.S. GEOL. SURVEY.
 AQUIFER.--SAND AND GRAVEL OF PLEISTOCENE AGE.
 WELL CHARACTERISTICS.--DRIVEN OBSERVATION WATER-TABLE WELL, DIAMETER 1 1/4 IN (0.03 M), DEPTH 27 FT (8.2 M). CASIED TO 25 FT (7.6 M), WELL POINT 25-27 FT (7.6-8.2 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 1,229 FT (375 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF PIPE, 0.80 FT (0.24 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--NOVEMBER 1946 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 12.77 FT (3.89 M) BELOW LAND-SURFACE DATUM, JULY 21, 1973; LOWEST WATER LEVEL MEASURED, 26.09 FT (7.95 M) BELOW LAND-SURFACE DATUM, MAR. 30, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	19.95	DEC 6	20.23	FEB 28	20.47	APR 3	19.70	JUN 5	18.69	AUG 7	18.26
NOV 29	20.18	JAN 31	20.35	MAR 27	20.60	MAY 1	19.45	JUL 3	18.44	SEP 25	18.59

GROUND-WATER LEVELS

MARINETTE COUNTY

453816087590101. LOCAL NUMBER, MT-37/20E/34-0007.
 LOCATION.--LAT 43°38'16", LONG 87°59'01", HYDROLOGIC UNIT 04030108. OWNER: WIS. DEPT. OF NATURAL RESOURCES.
 AQUIFER.--SAND AND GRAVEL OF PLEISTOCENE AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED WATER-TABLE WELL, DIAMETER 8 IN (0.20 M), DEPTH 33 FT (10 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 980 FT (299 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: POINTER ON FLOAT
 GAGE, 4.00 FT (1.22 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--MARCH 1939 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 18.01 FT (5.49 M) BELOW LAND-SURFACE DATUM,
 MAY 17, 1960; LOWEST WATER LEVEL MEASURED, 23.26 FT (7.09 M) BELOW LAND-SURFACE DATUM, NOV. 2, 1948.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	20.83	DEC 2	21.00	FEB 24	21.21	APR 6	20.09	JUN 29	20.00	AUG 31	20.93
NOV 25	20.99	JAN 27	21.09	MAR 16	21.27	MAY 4	19.79	JUL 27	20.46	SEP 28	21.20

MARQUETTE COUNTY

433956089275601. LOCAL NUMBER, MQ-14/09E/30-0026.
 LOCATION.--LAT 43°38'56", LONG 89°27'56", HYDROLOGIC UNIT 04030201. OWNER: WIS. DEPT. OF TRANSPORTATION.
 AQUIFER.--SANDSTONE OF CAMBRIAN AGE.
 WELL CHARACTERISTICS.--DRILLED DOMESTIC WATER-TABLE WELL, DIAMETER 6 IN (0.15 M), DEPTH 170 FT (51.8 M), CASED
 TO 145 FT (44.2 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 800 FT (244 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: 1/4 IN HOLE IN PUMP
 BASE, 1.00 FT (0.30 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--MAY 1965 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 12.80 FT (3.90 M) BELOW LAND-SURFACE DATUM,
 APR. 2, 1973; LOWEST WATER LEVEL MEASURED, 19.06 FT (5.81 M) BELOW LAND-SURFACE DATUM, AUG. 5, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	18.42	JAN 15	18.17	MAR 25	16.49	JUN 15	16.22	SEP 3	17.87	SEP 8	18.01
NOV 25	18.51	FEB 20	18.03	MAY 6	15.35	JUL 15	17.19				

435244089293401. LOCAL NUMBER, MQ-16/08E/12-0009.
 LOCATION.--LAT 43°52'44", LONG 89°29'34", HYDROLOGIC UNIT 04030201. OWNER: VILLAGE OF WESTFIELD.
 AQUIFER.--SANDSTONE OF CAMBRIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED ARTESIAN WELL, DIAMETER 6 IN (0.15 M), DEPTH 274 FT (83.5 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 880 FT (268 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASINO,
 1.00 FT (0.30 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--OCTOBER 1949 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 13.87 FT (4.23 M) BELOW LAND-SURFACE DATUM,
 JULY 11, 1973; LOWEST WATER LEVEL MEASURED, 18.21 FT (5.55 M) BELOW LAND-SURFACE DATUM, FEB. 18, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL								
OCT 28	16.63	JAN 15	16.70	MAR 25	16.54	JUN 15	16.14	JUL 15	16.52	SEP 8	17.05
NOV 25	16.67	FEB 20	16.89	MAY 6	16.32						

MILWAUKEE COUNTY

430412087545801. LOCAL NUMBER, ML-07/22E/17-0120.
 LOCATION.--LAT 43°04'12", LONG 87°54'58", HYDROLOGIC UNIT 04040003. OWNER: NUNN-BUSH SHOE CO.
 AQUIFER.--NIAGARA DOLOMITE OF SILURIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED ARTESIAN WELL, DIAMETER 10 IN (0.25 M), DEPTH 400 FT (122 M), CASED TO
 215 FT (65.5 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 685 FT (209 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CONCRETE
 8.75 FT (2.68 M) BELOW LAND-SURFACE DATUM.
 REMARKS.--WATER LEVEL AFFECTED BY PUMPING OF NEARBY WELLS.
 PERIOD OF RECORD.--APRIL 1946 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL, 69.90 FT (21.31 M) BELOW LAND-SURFACE DATUM, DEC. 27, 1976;
 LOWEST WATER LEVEL, 107.95 FT (32.90 M) BELOW LAND-SURFACE DATUM, FEB. 28, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.
 LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	75.45	74.94	74.31	74.15	73.86	73.21	72.88	72.50	71.76	72.31	72.05	72.33
10	75.18	74.51	74.16	74.06	73.76	73.08	72.99	72.45	72.27	72.88	72.16	72.20
15	74.94	74.59	74.31	73.97	73.41	73.14	72.67	72.38	72.36	72.02	72.23	72.13
20	74.87	74.55	74.49	73.80	73.47	72.40	72.60	72.17	72.17	72.18	72.37	71.81
25	74.89	74.65	74.17	73.63	73.58	72.76	72.49	72.28	72.08	72.40	72.34	71.71
EOB	75.10	74.16	73.91	73.69	73.38	72.64	72.70	72.18	72.10	72.16	72.32	71.52

WTR YEAR 1976 MAX 71.42 SEP 30, 1976 MIN 75.62 OCT 2, 1975

GROUND-WATER LEVELS

ONEIDA COUNTY

454026089425301. LOCAL NUMBER, ON-37/06E/27-0023.
 LOCATION.--LAT 45°40'26", LONG 89°42'53", HYDROLOGIC UNIT 07070001. OWNER: U.S. GEOL. SURVEY.
 AQUIFER.--SAND OF PLEISTOCENE AGE.
 WELL CHARACTERISTICS.--DRIVEN OBSERVATION WATER-TABLE WELL, DIAMETER 1 1/4 IN (0.03 M), DEPTH 37 FT (11.3 M),
 CASED TO 35 FT (10.7 M), WELL POINT 35-37 FT (10.7-11.3 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 1,529 FT (466 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING,
 1.00 FT (0.30 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--NOVEMBER 1944 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 26.35 FT (8.03 M) BELOW LAND-SURFACE DATUM,
 JULY 22, 1973; LOWEST WATER LEVEL MEASURED, 33.67 FT (10.26 M) BELOW LAND-SURFACE DATUM, APR. 5, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	29.25	DEC 1	29.54	FEB 29	29.52	APR 4	29.52	JUN 13	26.11	AUG 30	28.53
NOV 23	29.50	JAN 4	29.40	MAR 20	29.65	MAY 8	28.45	JUL 25	28.28	SEP 26	28.77

OUTAGAMIE COUNTY

4417340BB251101. LOCAL NUMBER, OU-21/17E/15-0029.
 LOCATION.--LAT 44°17'34", LONG 88°25'11", HYDROLOGIC UNIT 04030204. OWNER: HIGHLAND MEMORIAL PARK.
 AQUIFER.--SANDSTONE OF CAMBRIAN AGE.
 WELL CHARACTERISTICS.--DRILLED IRRIGATION ARTESIAN WELL, DIAMETER 10 IN (0.25 M), DEPTH 300 FT (91.4 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 839 FT (255 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF BREATHER
 HOLE, 2.00 FT (0.61 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--JULY 1951 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 54.84 FT (16.72 M) BELOW LAND-SURFACE DATUM,
 NOV. 24, 1955; LOWEST WATER LEVEL MEASURED, 64.48 FT (19.65 M) BELOW LAND-SURFACE DATUM, DEC. 30, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL										
OCT 22	59.30	DEC 19	58.80	FEB 27	59.23	APR 26	57.91	JUL 1	60.21	AUG 26	62.24
NOV 20	59.62	JAN 19	58.82	MAR 26	58.04	MAY 28	57.98	JUN 30	62.18	SEP 23	62.38

POLK COUNTY

453013092314601. LOCAL NUMBER, PK-35/17W/08-0040.
 LOCATION.--LAT 45°30'13", LONG 92°31'46", HYDROLOGIC UNIT 07030005. OWNER: VILLAGE OF MILLTOWN.
 AQUIFER.--DEPOSITS OF PLEISTOCENE AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED WATER-TABLE WELL, DIAMETER 5 IN (0.13 M), DEPTH 52 FT (15.8 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 1,250 FT (381 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: HOLE IN PUMP BASE,
 AT LAND-SURFACE DATUM.
 PERIOD OF RECORD.--SEPTEMBER 1957 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 31.04 FT (9.46 M) BELOW LAND-SURFACE DATUM,
 OCT. 1, 1975, APR. 27, 1976; LOWEST WATER LEVEL MEASURED, 41.38 FT (12.61 M) BELOW LAND-SURFACE DATUM,
 JULY 22, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL						
OCT 1	31.04	JAN 7	32.33	MAR 19	32.96	MAY 25	31.09	JUL 7	31.27	AUG 18	31.50
NOV 13	32.04	FEB 10	32.60	APR 27	31.04						

PORTAGE COUNTY

442100089384901. LOCAL NUMBER, PT-22/07E/35-0035.
 LOCATION.--LAT 44°21'00", LONG 89°38'49", HYDROLOGIC UNIT 07070003. OWNER: U.S. GEOL. SURVEY.
 AQUIFER.--SAND OF PLEISTOCENE AGE.
 WELL CHARACTERISTICS.--DRIVEN OBSERVATION WATER-TABLE WELL, DIAMETER 1 1/4 IN (0.03 M), DEPTH 11 FT (3.4 M),
 CASED TO 9 FT (2.7 M), WELL POINT 9-11 FT (2.7-3.4 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 1,054 FT (321 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING,
 1.00 FT (0.30 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--SEPTEMBER 1950 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 0.99 FT (0.30 M) BELOW LAND-SURFACE DATUM,
 APR. 9, 1951; LOWEST WATER LEVEL MEASURED, 6.43 FT (1.96 M) BELOW LAND-SURFACE DATUM, SEPT. 4, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	4.28	DEC 26	4.30	FEB 20	4.06	MAY 24	4.10	JUL 9	5.40	AUG 12	4.99
NOV 4	4.87	JAN 13	4.57	MAR 26	2.81						

SAUK COUNTY

432201089460101. LOCAL NUMBER, SK-10/06E/03-0001.
 LOCATION.--LAT 43°22'01", LONG 89°46'01", HYDROLOGIC UNIT 07070005. OWNER: RADGER ARMY AMMUNITION PLANT.
 AQUIFER.--SANDSTONE OF CAMBRIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED ARTESIAN WELL, DIAMETER 16 IN (0.40 M), DEPTH 426 FT (130 M), CASED TO
 203 FT (61.9 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 865 FT (264 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING,
 1.43 FT (0.44 M) ABOVE LAND-SURFACE DATUM.
 REMARKS.--WATER LEVEL AFFECTED BY PUMPING OF NEARBY WELLS.
 PERIOD OF RECORD.--MARCH 1946 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL, 58.45 FT (17.82 M) BELOW LAND-SURFACE DATUM, MAY 20, 1953;
 LOWEST WATER LEVEL, 93.25 FT (28.42 M) BELOW LAND-SURFACE DATUM, JUNE 4, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
 LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	64.18	63.76	64.09	64.76	65.36	64.41	63.54	62.53	65.67	66.96	63.81	66.67
10	63.95	63.24	64.09	65.29	64.76	64.21	63.16	63.37	66.86	67.85	64.00	66.52
15	63.72	63.78	64.15	65.03	64.35	64.50	62.82	62.97	64.80	67.96	64.03	65.79
20	63.70	62.99	64.61	65.18	64.56	63.44	62.63	63.02	65.76	65.17	64.90	65.10
25	63.66	64.53	64.13	65.31	64.43	63.46	62.60	63.58	63.95	65.50	65.25	65.16
EOM	63.91	64.06	64.45	65.10	64.12	63.32	62.41	63.83	64.06	64.14	64.33	65.12
WTR YEAR 1976	MAX	62.13	MAY 1, 1976	MIN	68.61	JUL 13, 1976						

SHAWANO COUNTY

444203088214601. LOCAL NUMBER, SH-26/18E/30-0061.
 LOCATION.--LAT 44°42'03", LONG 88°21'46", HYDROLOGIC UNIT 04030103. OWNER: HARRY SIEVERT.
 AQUIFER.--DOLOMITE OF PRAIRIE DU CHIEN GROUP OF ORDOVICIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED WATER-TABLE WELL, DIAMETER 6 IN (0.15 M), DEPTH 132 FT (40.2 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 917 FT (280 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: MOLE IN PUMP BASE,
 1.00 FT (0.30 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--APRIL 1947 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 52.86 FT (16.11 M) BELOW LAND-SURFACE DATUM,
 APR. 25, 1973; LOWEST WATER LEVEL MEASURED, 64.60 FT (19.69 M) BELOW LAND-SURFACE DATUM, JAN. 11, 1956.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL										
OCT 24	57.55	DEC 18	55.53	FEB 26	56.37	APR 27	53.23	JUN 25	55.49	AUG 25	58.68
NOV 20	56.58	JAN 22	56.10	MAR 25	56.12	MAY 27	54.67	JUL 28	57.61	SEP 22	59.21

TAYLOR COUNTY

450947090483901. LOCAL NUMBER, TA-31/04W/13-0001.
 LOCATION.--LAT 45°09'47", LONG 90°48'39", HYDROLOGIC UNIT 07050005. OWNER: VILLAGE OF GILMAN.
 AQUIFER.--DRIFT OF PLEISTOCENE AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED WATER-TABLE WELL, DIAMETER 18 IN (0.46 M), DEPTH 26 FT (7.9 M), CASED TO
 16 FT (4.9 M), SCREENED 16-26 FT (4.9-7.9 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 1,200 FT (366 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING,
 2.00 FT (0.61 M) ABOVE LAND-SURFACE DATUM.
 REMARKS.--WATER LEVEL AFFECTED BY PUMPING OF NEARBY WELLS.
 PERIOD OF RECORD.--APRIL 1957 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL, 4.00 FT (1.22 M) BELOW LAND-SURFACE DATUM, MAR. 15, 1973;
 LOWEST WATER LEVEL, 13.11 FT (4.00 M) BELOW LAND-SURFACE DATUM, OCT. 15, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
 LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.58	9.39	8.20	9.22	9.32	9.20	6.81	8.50	9.70	10.06	10.15	10.16
10	9.66	8.60	8.72	9.18	9.40	9.27	7.60	8.87	9.87	10.08	10.15	10.18
15	9.70	8.66	8.37	9.16	9.38	9.32	8.07	9.13	9.94	10.23	10.15	10.15
20	9.76	8.27	8.86	9.25	9.38	8.89	7.81	9.20	9.70	10.19	10.19	10.14
25	9.40	8.32	9.08	9.31	9.34	7.72	7.55	9.42	9.84	10.05	10.20	10.14
EOM	9.28	7.84	9.31	9.32	9.13	4.86	8.25	9.60	9.94	10.09	10.22	10.13
WTR YEAR 1976	MAX	4.57	MAR 31, 1976	MIN	10.23	JUL 15, 1976						

VILAS COUNTY

455814089130301. LOCAL NUMBER, VI-40/10E/10-0021.
 LOCATION.--LAT 45°58'14", LONG 89°13'03". HYDROLOGIC UNIT 07070001. OWNER: U.S. GEOL. SURVEY.
 AQUIFER.--SAND OF PLEISTOCENE AGE.
 WELL CHARACTERISTICS.--DRIVEN OBSERVATION WATER-TABLE WELL, DIAMETER 1 1/4 IN (0.03 M), DEPTH 27 FT (8.2 M),
 CASED TO 25 FT (7.6 M), WELL POINT 25-27 FT (7.6-8.2 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 1,640 FT (500 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING,
 1.00 FT (0.30 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--NOVEMBER 1944 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 11.38 FT (3.47 M) BELOW LAND-SURFACE DATUM,
 MAY 21, 1973; LOWEST WATER LEVEL MEASURED, 16.66 FT (5.14 M) BELOW LAND-SURFACE DATUM, MAR. 21, 1949.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL										
OCT 27	15.05	DEC 1	15.16	FEB 24	15.31	APR 5	14.69	JUN 28	14.13	AUG 31	14.86
NOV 25	15.20	JAN 27	15.16	MAR 17	15.40	MAY 18	13.97	JUL 26	14.42	SEP 27	15.19

WALWORTH COUNTY

423532088254601. LOCAL NUMBER, WW-02/17E/36-0037.
 LOCATION.--LAT 42°35'32", LONG 88°25'46". HYDROLOGIC UNIT 07120006. OWNER: LAKE GENEVA WATER WORKS.
 AQUIFER.--ST. PETER SANDSTONE OF ORDOVICIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED ARTESIAN WELL, DIAMETER 10 IN (0.25 M), DEPTH 820 FT (250 M), CASED TO
 10 IN (0.25 M) 0-214 FT (0-65 M), 8 IN (0.20 M) 214-227 FT (65-69 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 860 FT (262 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: HOLE IN EAST SIDE
 OF PUMP BASE, 1.00 FT (0.30 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--FEBRUARY 1962 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 129.48 FT (39.47 M) BELOW LAND-SURFACE DATUM,
 FEB. 14, 1962; LOWEST WATER LEVEL MEASURED, 184.26 FT (56.16 M) BELOW LAND-SURFACE DATUM, OCT. 26, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 5	178.15	JAN 20	177.83	MAR 31	178.16	JUN 3	178.62	AUG 18	183.31	SEP 22	183.94
DEC 2	178.90	FEB 26	177.89	MAY 3	178.77	JUL 20	181.79				

WAUKESHA COUNTY

425535088131701. LOCAL NUMBER, WK-05/19E/02-0031.
 LOCATION.--LAT 42°55'35", LONG 88°13'17". HYDROLOGIC UNIT 07120006. OWNER: WILLIAM M. FOSS.
 AQUIFER.--NIAGARA DOLOMITE OF SILURIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED ARTESIAN WELL, DIAMETER 6 IN (0.15 M), DEPTH 508 FT (155 M), CASED TO
 434 FT (132 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 962 FT (293 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING,
 1.00 FT (0.30 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--MAY 1947 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL, 126.28 FT (38.49 M) BELOW LAND-SURFACE DATUM, JUNE 10, 1974;
 LOWEST WATER LEVEL, 138.14 FT (42.10 M) BELOW LAND-SURFACE DATUM, FEB. 2, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
 LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	131.35	131.65	131.68	132.12	132.41	131.78	131.05	130.81	131.44	131.77	131.88	132.03
10	131.48	131.58	131.68	132.11	132.48	131.48	131.13	130.81	131.85	131.98	132.28	132.24
15	131.51	131.69	131.76	132.12	132.36	131.36	131.03	130.81	131.64	132.44	132.25	132.18
20	131.60	131.71		132.22	132.18	131.26	130.93	130.76	131.44	132.80	132.15	132.08
25	131.63	131.78	131.93	132.25	132.21	131.09	130.90	131.08	131.19	132.44	132.51	132.20
EOB	131.67	131.69	131.95	132.25	132.15	131.04	130.93	130.87	131.22	132.24	132.11	132.30

WTR YEAR 1976 MAX 130.69 MAY 17, 1976 MIN 132.97 JUL 19, 1976

WAUKESHA COUNTY

430049088131301. LOCAL NUMBER, WK-06/19E/02-0014.
 LOCATION.--LAT 43°00'49", LONG 88°13'13", HYDROLOGIC UNIT 07120006. OWNER: NEW TRIBES MISSION, WAUKESHA.
 AQUIFER.--SANDSTONE OF CAMBRIAN AGE AND ST. PETER SANDSTONE OF ORDOVICIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED ARTESIAN WELL, DIAMETER 8 IN (0.20 M), DEPTH 1,300 FT (396 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 875.03 FT (266.71 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING,
 AT LAND-SURFACE DATUM.
 REMARKS.--WATER LEVEL AFFECTED BY PUMPING OF NEARBY MUNICIPAL WELLS.
 PERIOD OF RECORD.--SEPTEMBER 1946 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL, 249.86 FT (76.16 M) BELOW LAND-SURFACE DATUM, JULY 6, 1947;
 LOWEST WATER LEVEL, 441.71 FT (134.63 M) BELOW LAND-SURFACE DATUM, JULY 22, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
 LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
S	426.31		418.77	414.46		418.51	414.78	420.73	431.00	434.22	432.76	433.40
10	427.19	422.95	418.93	416.88		416.19	416.68	420.64	433.41	437.50	433.23	432.67
15	427.60	422.96	419.48	416.61		414.64	416.91	424.51	434.83	439.99	433.71	432.81
20	423.69	420.73	418.79	415.80	414.94	415.92	416.58	426.37	434.70	441.60	435.29	433.25
25	425.04	421.42	416.68	418.24	415.17	415.23	419.37	428.98	432.74	439.97	436.16	431.50
EOM	422.93	419.40	414.46	416.83	414.49	414.82	420.73	428.19	432.19	435.22	436.38	433.04
MTR YEAR 1976 MAX 413.10 FEB 25, 1976 MIN 441.71 JUL 22, 1976												

WAUPACA COUNTY

441545088522901. LOCAL NUMBER, WP-21/13E/25-0002.
 LOCATION.--LAT 44°15'45", LONG 88°52'29", HYDROLOGIC UNIT 04030202. OWNER: VILLAGE OF FRENCHTOWN.
 AQUIFER.--SANDSTONE OF CAMBRIAN AGE.
 WELL CHARACTERISTICS.--DRILLED UNUSED ARTESIAN WELL, DIAMETER 8 IN (0.20 M), DEPTH 205 FT (62.5 M), CASED TO
 109 FT (33.2 M), OPEN END.
 DATUM.--ALTITUDE OF LAND-SURFACE IS 764 FT (233 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: HOLE IN CAP, 1.00 FT
 (0.30 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--AUGUST 1950 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL MEASURED, 9.70 FT (2.96 M) BELOW LAND-SURFACE DATUM,
 MAR. 24, 1973; LOWEST WATER LEVEL MEASURED, 15.91 FT (4.85 M) BELOW LAND-SURFACE DATUM, FEB. 23, 1954.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	13.98	DEC 27	14.13	FEB 7	14.45	APR 17	11.45	JUN 26	13.40	AUG 21	14.65
NOV 15	14.44	JAN 31	14.47	MAR 6	13.96	MAY 29	12.43	JUL 17	14.20	SEP 25	14.28

WAUSHARA COUNTY

440713089320801. LOCAL NUMBER, WS-19/08E/15-0008.
 LOCATION.--LAT 44°07'13", LONG 89°32'08", HYDROLOGIC UNIT 07070003. OWNER: UNIVERSITY OF WISCONSIN EXPERIMENT
 FARM, MANCOCK, WIS.
 AQUIFER.--SAND AND GRAVEL OF PLEISTOCENE AGE.
 WELL CHARACTERISTICS.--JETTED OBSERVATION WATER-TABLE WELL, DIAMETER 4 IN (0.10 M), DEPTH 18 FT (5.5 M), CASED
 TO 18 FT (5.5 M).
 DATUM.--ALTITUDE OF LAND-SURFACE IS 1,080 FT (329 M) ABOVE MEAN SEA LEVEL. MEASURING POINT: TOP OF CASING,
 1.00 FT (0.30 M) ABOVE LAND-SURFACE DATUM.
 PERIOD OF RECORD.--MAY 1951 TO CURRENT YEAR.
 EXTREMES FOR PERIOD OF RECORD.--HIGHEST WATER LEVEL, 5.88 FT (1.79 M) BELOW LAND-SURFACE DATUM, JULY 5, 1973;
 LOWEST WATER LEVEL, 15.71 FT (4.79 M) BELOW LAND-SURFACE DATUM, JUNE 10, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
 LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
S	8.38	8.72	9.00	9.32	9.60	9.81	9.10	8.38	8.23	8.95	9.38	9.94
10	8.43	8.75	9.05	9.35	9.63	9.84	8.98	8.28	8.50	9.03	9.49	9.97
15	8.47	8.78	9.10	9.42	9.67	9.82	8.87	8.22	8.55	9.13	9.58	10.09
20	8.51	8.83	9.15	9.45	9.74	9.37	8.80	8.15	8.50	9.21	9.65	9.97
25	8.58	8.90	9.19	9.49	9.77	9.13	8.71	8.13	8.77	9.30	9.75	10.16
EOM	8.66	8.93	9.30	9.54	9.77	9.15	8.57	8.13	8.85	9.36	9.83	10.08
MTR YEAR 1976 MAX 8.13 MAY 27, 1976 MIN 10.16 SEP 25, 1976												

FIGURE 8. GROUND-WATER-QUALITY STATIONS IN WISCONSIN

1976 WATER YEAR



WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

AQUIFER.--100SDGV, SAND-AND-GRAVEL AQUIFER, INCLUDES DEPOSITS OF THE HOLOCENE AND PLEISTOCENE SERIES OF THE QUATERNARY SYSTEM. 350SLDL, SILURIAN DOLOMITE AQUIFER, INCLUDES ROCKS OF THE UPPER AND MIDDLE SERIES OF THE DEVONIAN SYSTEM AND THE CAYUGAN, NIAGARAN, AND ALEXANDRIAN SERIES OF THE SILURIAN SYSTEM. 362MOKS, MAQUOKETA SHALE AQUIFER, INCLUDES ROCKS OF THE CINCIANNATIAN SERIES OF THE ORDOVICIAN SYSTEM. 300SNDS, SANDSTONE AQUIFER, INCLUDES ROCKS OF THE CHAMPLAINIAN AND CANADIAN SERIES OF THE ORDOVICIAN SYSTEM AND OF THE ST CROIXAN SERIES OF THE CAMBRIAN SYSTEM. 420LKSS, LAKE SUPERIOR SANDSTONE AQUIFER, INCLUDES ROCKS OF THE BAYFIELD AND ORONTO GROUPS OF THE PRECAMBRIAN ERATHEM. 420LVFL, LAVA FLOW AQUIFER, INCLUDES EXTRUSIVE IGNEOUS ROCKS OF THE KEWEEAWAN SUPER GROUP OF THE PRECAMBRIAN ERATHEM. 400BCPX, BASEMENT COMPLEX AQUIFER, INCLUDES OTHER ROCKS OF THE PRECAMBRIAN ERATHEM.

STATION NUMBER	LOCAL IDENTIFIER	AQUIFER	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
ADAMS COUNTY									
441355089364001	AD-20/07E/01-0018	100SDGV	101	76-06-05	410	7.2	10.5	200	59
ASHLAND COUNTY									
461109090373001	AS-43/02W/21-0054	100SDGV	73	76-05-19	190	8.1	9.0	--	--
462945090541701	AS-46/04W/06-00025P	--	--	76-09-21	222	8.2	8.0	99	0
462946090541601	AS-46/04W/06-00015P	--	--	76-09-21	1420	7.0	13.0	750	0
462956090541101	AS-46/04W/06-00073	420LKSS	78	76-09-01	950	7.4	14.0	--	--
463209090342701	AS-47/02W/23-0009	100SDGV	142	76-05-20	95	8.4	10.5	--	--
BARRON COUNTY									
452115091433501	BR-33/11W/09-0156	100SDGV	76	76-07-09	280	7.0	11.0	100	77
452129091442501	BR-33/11W/09-0158	100SDGV	82	76-07-07	370	7.0	10.5	140	120
452353092003701	BR-34/14W/30-0192	300SNDS	748	76-07-07	390	7.6	10.0	190	0
452415091403001	BR-34/11W/25-0144	100SDGV	90	76-09-03	260	6.4	8.0	--	--
452430091353201	BR-34/10W/22-0153	300SNDS	132	76-05-21	60	6.3	11.5	--	--
452507091471401	BR-34/12W/24-0113	100SDGV	73	76-09-03	260	6.5	8.5	--	--
453022092105101	BR-36/14W/22-0394	300SNDS	151	76-09-03	340	7.5	9.0	--	--
BAYFIELD COUNTY									
461154090583301	BA-43/05W/15-0168	100SDGV	81	76-05-19	190	8.2	11.0	--	--
462658091061001	BA-46/06W/22-0136	100SDGV	180	76-09-01	275	8.2	10.0	--	--
463420090581401	BA-47/05W/10-0037	420LKSS	230	76-05-20	625	7.1	10.5	--	--
463523090570501	BA-48/05W/35-0167	100SDGV	398	76-09-02	135	8.1	7.5	--	--
464711090515001	BA-50/04W/28-0001	420LKSS	804	76-09-02	400	7.4	8.5	--	--
465046091071601	BA-50/06W/04-0169	100SDGV	74	76-09-02	260	8.3	7.0	--	--
BROWN COUNTY									
441609087585101	BN-21/21E/29-0140	350SLDL	47	76-05-27	740	7.4	9.5	--	--
443907088001901	BN-25/21E/07-0078	300SNDS	198	76-06-07	710	6.6	12.8	--	--
				76-05-27	500	7.7	9.0	--	--
BUFFALO COUNTY									
441912091420601	BF-21/11W/03-0075	300SNDS	208	76-06-01	8000	7.4	9.5	--	--
BURNETT COUNTY									
454037092072901	BT-37/14W/20-0052	300SNDS	244	76-09-17	260	--	12.0	120	0
454115092061501	BT-37/14W/16-0053	100SDGV	87	76-09-17	275	--	10.0	100	0
460024092214901	BT-41/16W/28-0078	100SDGV	75	76-09-21	230	--	13.0	100	28
CALUMET COUNTY									
440004088121201	CA-18/19E/27-0037	350SLDL	142	76-06-04	810	7.8	9.5	390	79
441216088202101	CA-20/18E/15-0050	300SNDS	458	76-05-27	520	7.2	10.0	--	--
CHIPPEWA COUNTY									
445250091273101	CH-28/09W/27-0111	300SNDS	59	76-08-05	85	--	13.5	26	7
445400091281101	CH-28/09W/21-0167	300SNDS	93	76-05-17	100	6.8	11.5	--	--
445751091175001	CH-29/08W/25-0204	100SDGV	103	76-08-04	155	7.0	12.5	56	8
445756091175601	CH-29/08W/25-0205	100SDGV	64	76-08-04	155	7.0	12.0	55	18
451039091315101	CH-31/09W/18-0164	300SNDS	100	76-05-24	145	6.2	10.5	--	--
CLARK COUNTY									
443915090341101	CK-25/02W/13-0425	400BCPX	127	76-05-24	240	6.8	11.5	--	--
COLUMBIA COUNTY									
431804089193201	CO-10/10E/29-0075	300SNDS	320	76-08-11	640	7.3	11.5	--	--
432417089172601	CO-11/10E/22-0619	300SNDS	130	75-12-16	562	7.3	9.5	310	51
432417089172602	CO-11/10E/22-00015P	--	--	76-02-25	640	7.0	10.5	330	56
				76-02-25	650	7.1	10.5	320	51
				76-05-18	590	7.0	9.0	300	42
432528089162501	CO-11/10E/14-0618	100SDGV	5.5	75-11-19	450	7.0	10.5	240	32
				76-02-25	550	7.1	4.0	250	9
433239089283601	CO-12/09E/07-0010	300SNDS	255	76-05-18	240	7.0	11.5	110	11
433402089024701	CO-13/12E/26-0151	300SNDS	147	76-06-07	480	7.2	18.5	--	--
				76-08-12	750	6.8	17.5	--	--
433714089012201	CO-13/12E/01-0084	100SDGV	45	76-08-12	670	7.1	15.0	--	--

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED MANGANESE (MG/L)	TOTAL MERCURY (MG/L)	DIS-SOLVED MERCURY (MG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
ADAMS COUNTY											
441355089364001	76-06-05	80	<.5	--	--	0	0	0	--	2.6	.1
ASHLAND COUNTY											
461109090373001	76-05-19	--	--	--	8	0	0	100	3.7	--	--
462945090541701	76-09-21	--	--	--	--	--	--	--	1.1	--	--
462946090541601	76-09-21	--	--	--	--	--	--	--	16	--	--
462956090541101	76-09-01	--	--	--	--	--	--	970	.6	--	--
463209090342701	76-05-20	--	--	<.5	0	0	0	130	5.1	--	--
BARRON COUNTY											
452115091433501	76-07-09	0	<.5	--	--	0	0	10	--	2.9	.1
452129091442501	76-07-07	0	<.5	--	--	0	0	10	--	.7	.2
452353092083701	76-07-07	250	<.5	--	--	0	0	20	--	4.0	.0
452415091403001	76-09-03	--	--	--	--	--	--	30	1.5	--	--
452430091353201	76-05-21	--	--	<.5	9	0	0	370	9.0	--	--
452507091471401	76-09-03	--	--	--	--	--	--	30	3.5	--	--
453022092105101	76-09-03	--	--	--	--	--	--	20	3.7	--	--
BAYFIELD COUNTY											
461154090583301	76-05-19	--	--	--	5	0	1	190	1.5	--	--
462658091061001	76-09-01	--	--	--	--	--	--	350	1.6	--	--
4634200905081401	76-05-20	--	--	<.5	3	0	0	120	3.3	--	--
463523090570501	76-09-02	--	--	--	--	--	--	10	2.9	--	--
464711090515001	76-09-02	--	--	--	--	--	--	30	3.1	--	--
465046091071601	76-09-02	--	--	--	--	--	--	40	8.0	--	--
BROWN COUNTY											
441609087585101	76-05-27	--	--	<.5	0	0	0	80	4.7	--	--
	76-06-07	--	--	<.5	0	0	0	160	1.3	--	--
443907088001901	76-05-27	--	--	<.5	0	0	0	340	4.5	--	--
BUFFALO COUNTY											
441912091420601	76-06-01	--	--	<.5	2	0	0	200	1.8	--	--
BURNETT COUNTY											
454037092072901	76-09-17	0	<.5	--	--	0	0	180	--	4.2	.0
454115092061501	76-09-17	360	<.5	--	--	0	0	3200	--	6.0	.0
460024092214901	76-09-21	0	<.5	--	--	0	0	70	--	1.1	.0
CALUMET COUNTY											
440004088121201	76-06-04	0	<.5	--	--	0	0	0	--	2.7	.1
441216088202101	76-05-27	--	--	<.5	0	1	0	0	7.8	--	--
CHIPPEWA COUNTY											
445250091273101	76-08-05	10	<.5	--	--	0	0	200	--	4.7	.0
445400091281101	76-05-17	--	--	--	6	0	1	480	3.8	--	--
445751091175001	76-08-04	0	<.5	--	--	1	0	530	--	5.5	.0
445756091175601	76-08-04	0	<.5	--	--	0	0	710	--	4.9	.0
451039091315101	76-05-24	--	--	<.5	6	5	0	10	4.2	--	--
CLARK COUNTY											
443915090341101	76-05-24	--	--	<.5	3	0	0	80	3.2	--	--
COLUMBIA COUNTY											
431804089193201	76-08-11	--	--	--	--	--	--	30	7.6	--	--
432417089172601	75-12-16	0	--	--	--	--	--	--	--	4.1	--
	76-02-25	10	--	--	--	--	--	--	--	18	--
432417089172602	76-02-25	10	--	--	--	--	--	--	--	5.8	--
	76-05-18	0	--	--	--	--	--	--	--	2.8	--
432528089162501	75-11-19	290	--	--	--	--	--	--	--	9.1	--
	76-02-25	330	--	--	--	--	--	--	--	13	--
	76-05-18	200	--	--	--	--	--	--	--	10	--
433239089283601	76-06-07	--	--	<.5	3	0	0	40	5.2	--	--
433402089024701	76-08-12	--	--	--	--	--	--	2200	4.4	--	--
433714089012201	76-08-12	--	--	--	--	--	--	--	12	--	--

WATER QUALITY DATA WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	LOCAL IDENTIFIER	AQUIFER	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
CRAWFORD COUNTY									
431946090442701	CR-10/03W/21-0169	300SNOS	525	76-05-25	1500	6.7	10.5	--	--
DANE COUNTY									
425536089194201	DN-05/10E/04-0998	300SNDS	51	76-07-15	710	7.6	14.0	--	--
425736089172201	DN-06/10E/27-0965	300SNDS	250	76-08-02	600	7.3	11.0	300	8
425742009205001	DN-06/10E/20-1012	300SNDS	126	76-05-26	620	7.1	11.0	--	--
425752089205001	DN-06/10E/20-1013	300SNOS	111	76-07-15	760	7.3	15.0	--	--
425806089172701	DN-06/10E/22-0338	300SNDS	275	76-08-02	600	7.5	11.0	290	0
430055009242701	DN-06/09E/10-1045	300SNDS	14	75-11-19	460	7.0	10.5	200	3
430057089245901	DN-06/09E/10-1048	100SDGV	136	75-11-19	560	7.0	10.0	280	11
430108089242301	DN-06/09E/03-1050	100SDGV	9.0	75-11-19	600	8.1	10.0	280	0
430245089260401	DN-07/09E/33-1005	100SDGV	53	76-08-17	850	7.1	17.0	--	--
430359089360201	DN-07/08E/19-1053	300SNOS	240	75-10-06	380	7.4	12.0	160	10
				75-11-17	415	7.0	11.5	170	21
				76-03-01	420	6.9	9.0	160	5
				76-03-17	169	6.5	9.5	72	15
				76-05-19	305	7.0	12.0	110	12
430440089281001	DN-07/09E/18-0715	300SNOS	715	76-08-17	510	5.5	11.0	--	--
DODGE COUNTY									
431829080430902	DG-10/15E/28-0068	300SNDS	345	76-05-27	790	7.5	12.0	350	36
431850088473101	DG-10/14E/25-0095	300SNDS	119	76-08-12	630	6.9	15.5	--	--
431852088321401	DG-10/16E/24-0080	100SDGV	40	76-05-26	770	7.1	9.5	--	--
432706088500602	DG-11/14E/04-0113	300SNOS	313	76-05-27	600	7.6	11.0	310	29
433386088254301	DG-13/17E/35-0082	300SNDS	140	76-05-27	610	7.0	9.5	--	--
433623088544501	DG-13/13E/11-0128	300SNDS	254	76-05-27	600	7.2	11.5	280	4
433652088545601	DG-13/13E/11-0074	300SNDS	375	76-05-27	500	7.5	12.0	300	28
DOOR COUNTY									
450955087132501	DR-31/27E/16-0018	362MQKS	452	76-09-24	680	7.3	10.0	--	--
DOUGLAS COUNTY									
460955092141001	DS-43/15W/34-0295	100SDGV	40	76-09-16	350	--	10.0	170	0
461301092083001	DS-43/14W/08-0299	4008CPX	31	76-08-12	220	--	15.0	93	32
461301092091301	DS-43/14W/08-0298	100SDGV	21	76-08-12	560	--	13.5	200	90
461418091375201	DS-43/10W/04-0331	100SDGV	88	76-05-21	130	8.2	12.0	--	--
462215091483401	DS-45/12W/24-0253	100SDGV	72	76-09-16	175	--	9.0	80	15
462802091335901	DS-46/10W/13-0223	100SDGV	278	76-09-01	180	7.6	8.0	--	--
463227091523201	DS-47/12W/21-0008	420LVFL	426	76-09-01	410	8.4	8.0	--	--
463343092042001	DS-47/14W/12-0317	4008CPX	128	76-05-21	650	8.6	11.5	--	--
463428092071201	DS-47/14W/09-0334	420LKSS	180	76-09-01	740	7.8	11.0	--	--
463906091384601	DS-48/10W/08-0028	420LKSS	203	76-05-20	1000	7.2	13.0	--	--
464337092060701	DS-49/14W/15-0005	420LKSS	611	76-09-01	1000	8.1	7.5	--	--
DUNN COUNTY									
444625091555401	DU-27/13W/35-0090	300SNDS	340	76-05-17	390	7.6	11.0	--	--
445548092070001	DU-28/14W/07-0061	300SNDS	239	76-09-03	510	7.5	13.0	--	--
EAU CLAIRE COUNTY									
443549091000501	EC-25/05W/33-0116	300SNDS	100	76-09-03	100	5.0	11.0	--	--
FLORENCE COUNTY									
454607088275101	FC-38/16E/14-0089	100SDGV	13	76-02-12	195	8.2	2.5	70	13
				76-05-26	280	7.0	6.0	130	0
454612088275901	FC-38/16E/14-0088	100SDGV	--	75-10-24	270	7.5	10.0	140	15
				76-02-11	290	7.4	5.5	140	9
				76-05-26	290	7.5	6.5	140	12
454613088275701	FC-38/16E/15-0001SP	--	--	75-10-24	350	7.5	9.5	160	15
FOND DU LAC COUNTY									
434339088255201	FL-15/17E/11-0042	300SNDS	501	76-05-27	680	7.1	10.0	--	--
434512088380101	FL-15/16E/19-0332	300SNDS	330	76-06-04	620	7.2	9.5	310	3
434515088243101	FL-15/17E/24-0372	300SNDS	460	76-06-04	1000	7.2	11.0	400	87
435045088490901	FL-16/14E/22-0050	300SNDS	495	76-08-03	650	7.5	10.0	310	10
FOREST COUNTY									
453256088391801	FR-35/15E/06-0095	100SDGV	63	76-05-26	205	8.0	10.5	--	--
GRANT COUNTY									
423200090260601	GR-01/01W/25-0040	300SNDS	1000	76-05-28	590	7.4	14.0	310	--
				76-07-02	570	6.8	13.0	290	21
423522090255101	GR-01/01W/01-0101	300SNOS	103	76-07-13	1200	7.6	14.0	--	--
423747090354901	GR-02/02W/22-0011	300SNOS	870	76-05-28	700	7.5	11.5	360	48

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM AD-SORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
CRAWFORD COUNTY											
431946090442701	76-05-25	--	--	--	--	--	--	--	--	--	--
DANE COUNTY											
425538089194201	76-07-15	--	--	--	--	--	--	--	--	--	--
425738089172201	76-08-02	62	36	2.7	2	.1	1.1	360	0	295	29
425742089205001	76-05-26	--	--	--	--	--	--	--	--	--	--
425752089205001	76-07-15	--	--	--	--	--	--	--	--	--	--
425806089172701	76-08-02	65	30	3.8	3	.1	1.1	354	0	290	16
430055089242701	75-11-19	57	14	1.1	1	.0	.7	240	0	197	38
430057089245901	75-11-19	52	37	3.1	2	.1	2.0	331	0	271	53
430108089242301	75-11-19	52	37	2.7	2	.1	1.0	361	0	296	4.6
430245089260401	76-08-17	35	17	6.3	8	.2	7.0	180	0	148	11
430359089360201	75-10-06	35	17	6.3	8	.2	7.0	180	0	148	11
	75-11-17	38	19	6.1	7	.2	5.6	185	0	152	30
	76-03-01	36	17	6.3	8	.2	5.9	189	0	155	38
	76-03-17	15	8.5	2.4	6	.1	8.0	70	0	57	35
	76-05-19	24	13	6.1	10	.3	8.5	124	0	102	20
430440089281001	76-08-17	--	--	--	--	--	--	--	--	--	--
DODGE COUNTY											
431829088430902	76-05-27	73	41	5.2	3	.1	1.6	384	0	315	19
431850088473101	76-08-12	--	--	--	--	--	--	--	--	--	--
431852088321401	76-05-26	--	--	--	--	--	--	--	--	--	--
432760088508602	76-05-27	70	34	3.3	2	.1	1.6	349	0	286	14
433326088254301	76-05-27	--	--	--	--	--	--	--	--	--	--
433623088544501	76-05-27	64	28	2.3	2	.1	.9	330	0	271	33
433652088545601	76-05-27	68	32	2.4	2	.1	1.0	333	0	273	17
DOOR COUNTY											
450955087132501	76-09-24	--	--	--	--	--	--	--	--	--	--
DOUGLAS COUNTY											
460955092141001	76-09-16	35	20	8.0	9	.3	2.5	219	--	180	--
461301092083001	76-08-12	19	11	5.5	11	.2	.6	74	--	61	--
461301092091301	76-08-12	44	23	20	23	.9	.7	140	--	115	--
461418091375201	76-05-21	--	--	--	--	--	--	--	--	--	--
462215091483401	76-09-16	20	7.2	2.7	7	.1	.8	79	--	65	--
462802091335901	76-09-01	--	--	--	--	--	--	--	--	--	--
463227091523201	76-09-01	--	--	--	--	--	--	--	--	--	--
463343092042001	76-05-21	--	--	--	--	--	--	--	--	--	--
463428092071201	76-09-01	--	--	--	--	--	--	--	--	--	--
463906091384601	76-05-20	--	--	--	--	--	--	--	--	--	--
464337092060701	76-09-01	--	--	--	--	--	--	--	--	--	--
DUNN COUNTY											
444625091555401	76-05-17	--	--	--	--	--	--	--	--	--	--
445548092070001	76-09-03	--	--	--	--	--	--	--	--	--	--
EAU CLAIRE COUNTY											
443549091000501	76-09-03	--	--	--	--	--	--	--	--	--	--
FLORENCE COUNTY											
454607088275101	76-02-12	16	7.3	3.2	9	.2	1.8	69	0	57	.7
	76-05-26	28	14	1.5	2	.1	1.4	155	0	127	25
454612088275901	75-10-24	31	15	1.5	2	.1	1.2	151	0	124	7.6
	76-02-11	30	15	1.1	2	.0	1.2	156	0	128	9.9
	76-05-26	28	17	1.2	2	.0	1.0	156	0	128	7.9
454613088275701	75-10-24	36	18	1.6	2	.1	1.4	182	0	149	9.2
FOND DU LAC COUNTY											
434339088255201	76-05-27	--	--	--	--	--	--	--	--	--	--
434512088380101	76-06-04	65	37	3.1	2	.1	1.6	380	0	312	38
434515088243101	76-06-04	78	51	24	11	.5	7.9	387	0	317	39
435045088490901	76-08-03	69	34	2.4	2	.1	1.3	369	0	303	19
FOREST COUNTY											
453256088391801	76-05-26	--	--	--	--	--	--	--	--	--	--
GRANT COUNTY											
423200090260601	76-05-28	64	36	1.2	1	.0	1.4	--	0	--	--
	76-07-02	59	34	1.3	1	.0	1.6	325	0	267	82
423522090255101	76-07-13	--	--	--	--	--	--	--	--	--	--
423747090354901	76-05-28	80	40	2.9	2	.1	1.5	386	0	317	20

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
CRAWFORD COUNTY											
431946090442701	76-05-25	--	--	--	--	--	--	--	--	--	--
DANE COUNTY											
425538089194201	76-07-15	--	--	--	--	--	--	--	--	--	--
425738089172201	76-08-02	2.6	2.2	.1	14	300	302	.77	3.4	.01	.03
425742089205001	76-05-26	--	--	--	--	--	--	--	--	--	--
425752089205001	76-07-15	--	--	--	--	--	--	--	--	--	--
425806089172701	76-08-02	3.3	8.0	.1	15	326	305	.97	4.3	.01	.03
430055089242701	75-11-19	18	6.3	.1	11	255	229	.15	.66	.01	.03
430057089245901	75-11-19	16	4.1	.1	16	303	301	1.8	7.9	.01	.03
430108089242301	75-11-19	6.1	1.9	.0	16	291	299	.04	.18	.00	.00
430245089260401	76-08-17	--	--	--	--	--	--	--	--	--	--
430359089360201	75-10-06	8.4	16	.1	8.9	204	190	.00	.00	.00	.00
	75-11-17	11	18	.0	9.0	211	199	--	--	--	--
	76-03-01	11	19	.0	8.7	197	201	.02	.09	.01	.03
	76-03-17	15	8.6	.2	5.4	143	104	1.0	4.6	.06	.20
	76-05-19	9.3	16	.1	2.3	161	142	.00	.00	.01	.03
430440089281001	76-08-17	--	--	--	--	--	--	--	--	--	--
DODGE COUNTY											
431829088430902	76-05-27	26	6.9	.2	11	230	356	.00	.00	.01	.03
431850088473101	76-08-12	--	--	--	--	--	--	--	--	--	--
431852088321401	76-05-26	--	--	--	--	--	--	--	--	--	--
432706088500602	76-05-27	20	4.4	.2	10	298	317	.01	.04	.00	.00
433326088254301	76-05-27	--	--	--	--	--	--	--	--	--	--
433623088544501	76-05-27	11	.5	.2	13	368	283	.03	.13	.00	.00
433652088545601	76-05-27	16	.4	.1	13	435	298	.06	.27	.01	.03
DOOR COUNTY											
450955087132501	76-09-24	--	--	--	--	377	--	--	--	--	--
DOUGLAS COUNTY											
460955092141001	76-09-16	4.2	3.0	.3	23	202	204	.00	.00	.00	.00
461301092083001	76-08-12	12	8.2	.1	26	152	140	4.7	21	.01	.03
461301092091301	76-08-12	9.3	88	.1	27	375	298	1.9	8.4	.01	.03
461418091375201	76-05-21	--	--	--	--	--	--	--	--	--	--
462215091483401	76-09-16	21	2.6	.1	13	108	107	.17	.75	.00	.00
462802091335901	76-09-01	--	--	--	--	85	--	--	--	--	--
463227091523201	76-09-01	--	--	--	--	224	--	--	--	--	--
463343092042001	76-05-21	--	--	--	--	--	--	--	--	--	--
463428092071201	76-09-01	--	--	--	--	435	--	--	--	--	--
463906091384601	76-05-20	--	--	--	--	--	--	--	--	--	--
464337092060701	76-09-01	--	--	--	--	522	--	--	--	--	--
DUNN COUNTY											
444625091555401	76-05-17	--	--	--	--	--	--	--	--	--	--
445548092070001	76-09-03	--	--	--	--	273	--	--	--	--	--
EAU CLAIRE COUNTY											
443549091000501	76-09-03	--	--	--	--	62	--	--	--	--	--
FLORENCE COUNTY											
454607088275101	76-02-12	21	3.5	.3	.8	95	88	.01	.04	.01	.03
	76-05-26	11	2.1	.1	4.2	149	139	.00	.00	.01	.03
454612088275901	75-10-24	13	.6	.1	12	--	149	.06	.27	.00	.00
	76-02-11	16	.9	.2	11	144	153	.07	.31	.01	.03
	76-05-26	15	1.6	.1	11	218	152	.05	.22	.01	.03
454613088275701	75-10-24	14	.7	.1	12	174	174	.03	.13	.00	.00
FOND DU LAC COUNTY											
434339088255201	76-05-27	--	--	--	--	--	--	--	--	--	--
434512088380101	76-06-04	14	2.6	.2	10	318	321	.03	.13	.01	.03
434515088243101	76-06-04	140	17	.6	24	556	535	.14	.62	.02	.07
435045088490901	76-08-03	16	.8	.2	12	316	319	.01	.04	.01	.03
FOREST COUNTY											
453256088391801	76-05-26	--	--	--	--	--	--	--	--	--	--
GRANT COUNTY											
423200090260601	76-05-28	19	.5	.1	9.0	299	--	.00	.00	.01	.03
	76-07-02	20	1.8	.1	9.2	263	287	.00	.00	.00	.00
423252090255101	76-07-13	--	--	--	--	--	--	--	--	--	--
423747090354901	76-05-28	35	2.3	.1	10	310	363	.07	.31	.01	.03

QUALITY OF GROUND WATER
WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA (NHA) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL-GEN (N) (MG/L)	DIS-SOLVED KJEL- NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)
CRAWFORD COUNTY											
431946090442701	76-05-25	--	--	--	--	--	--	--	--	--	--
DANE COUNTY											
425538089194201	76-07-15	--	--	--	--	--	--	--	--	--	--
425738089172201	76-08-02	.78	--	.01	.01	--	.27	--	.28	--	--
425742089205001	76-05-26	--	--	--	--	--	--	--	--	--	--
425752089205001	76-07-15	--	--	--	--	--	--	--	--	--	--
425806089172701	76-08-02	.98	--	.02	.03	--	.21	--	.23	--	--
430055089242701	75-11-19	.16	--	--	--	--	--	.42	--	.17	.52
430057089245901	75-11-19	1.8	--	--	--	--	--	.07	--	.02	.06
430108089242301	75-11-19	.04	--	--	--	--	--	.95	--	.19	.58
430245089260401	76-08-17	--	--	--	--	--	--	--	--	--	--
430359089360201	75-10-06	.00	--	--	--	--	--	1.4	--	.13	.40
	75-11-17	--	--	--	--	--	--	.33	--	.11	.34
	76-03-01	.03	--	--	--	--	--	2.2	--	.10	.31
	76-03-17	1.1	--	--	--	--	--	1.5	--	.29	.89
	76-05-19	.01	.06	--	--	1.3	--	1.4	--	.32	.98
430440089281001	76-08-17	--	--	--	--	--	--	--	--	--	--
DODGE COUNTY											
431829088430902	76-05-27	.01	--	.15	.19	--	.10	--	.25	--	--
431850088473101	76-08-12	--	--	--	--	--	--	--	--	--	--
431852088321401	76-05-26	--	--	--	--	--	--	--	--	--	--
432706088500602	76-05-27	.01	--	.12	.15	--	.23	--	.35	--	--
433326088254301	76-05-27	--	--	--	--	--	--	--	--	--	--
433623088544501	76-05-27	.03	--	.04	.05	--	.21	--	.25	--	--
433652088545601	76-05-27	.07	--	.02	.03	--	.06	--	.08	--	--
DOOR COUNTY											
450955087132501	76-09-24	--	--	--	--	--	--	--	--	--	--
DOUGLAS COUNTY											
460955092141001	76-09-16	.00	--	.11	.14	--	.00	--	.10	--	--
461301092083001	76-08-12	4.7	--	.10	.13	--	.00	--	.10	--	--
461301092091301	76-08-12	1.9	--	.00	.00	--	.35	--	.35	--	--
46148091375201	76-05-21	--	--	--	--	--	--	--	--	--	--
462215091483401	76-09-16	.17	--	.01	.01	--	.00	--	.00	--	--
462802091335901	76-09-01	--	--	--	--	--	--	--	--	--	--
463227091523201	76-09-01	--	--	--	--	--	--	--	--	--	--
463343092042001	76-05-21	--	--	--	--	--	--	--	--	--	--
463428092071201	76-09-01	--	--	--	--	--	--	--	--	--	--
463906091384601	76-05-20	--	--	--	--	--	--	--	--	--	--
464337092060701	76-09-01	--	--	--	--	--	--	--	--	--	--
DUNN COUNTY											
444625091555401	76-05-17	--	--	--	--	--	--	--	--	--	--
445548092070001	76-09-03	--	--	--	--	--	--	--	--	--	--
EAU CLAIRE COUNTY											
443549091000501	76-09-03	--	--	--	--	--	--	--	--	--	--
FLORENCE COUNTY											
454607088275101	76-02-12	.02	--	--	--	--	--	1.1	--	.11	.34
	76-05-26	.01	.01	--	--	.49	--	.50	--	.16	.49
454612080275901	75-10-24	.06	--	--	--	--	--	.15	--	.46	1.4
	76-02-11	.08	--	--	--	--	--	.09	--	.27	.83
	76-05-26	.06	.01	--	--	.67	--	.68	--	.49	1.5
454613088275701	75-10-24	.03	--	--	--	--	--	.05	--	.01	.03
FOND DU LAC COUNTY											
434339088255201	76-05-27	--	--	--	--	--	--	--	--	--	--
434512088380101	76-06-04	.04	--	.05	.06	--	.08	--	.13	--	--
434515088243101	76-06-04	.16	--	.18	.23	--	.22	--	.40	--	--
435045088490901	76-08-03	.02	--	.09	.12	--	.19	--	.28	--	--
FOREST COUNTY											
453256088391801	76-05-26	--	--	--	--	--	--	--	--	--	--
GRANT COUNTY											
423200090260601	76-05-28	.01	--	.02	.03	--	.03	--	.05	--	--
	76-07-02	.00	--	.00	.00	--	.00	--	.00	--	--
423522090255101	76-07-13	--	--	--	--	--	--	--	--	--	--
423747090364901	76-05-28	.08	--	.00	.00	--	.05	--	.05	--	--

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	SOLVED-PHOSPHORUS (P) (UG/L)	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)
CRAWFORD COUNTY											
431946090442701	76-05-25	--	--	0	--	0	<10	0	10	--	1
DANE COUNTY											
425538089194201	76-07-15	--	--	2	--	3	<10	0	10	--	14
425738089172201	76-08-02	.03	--	0	10	2	--	2	0	10	4
425742089205001	76-05-26	--	--	0	--	0	<10	3	0	--	2
425752089205001	76-07-15	--	--	0	--	1	10	0	200	--	4
425806089172701	76-08-02	.02	--	0	10	0	--	1	10	10	1
430055089242701	75-11-19	--	--	--	--	--	--	--	--	1300	--
430057089245901	75-11-19	--	--	--	--	--	--	--	--	0	--
430108089242301	75-11-19	--	--	--	--	--	--	--	--	3600	--
430245089260401	76-08-17	--	--	--	--	--	--	--	10	--	9
430359089360201	75-10-06	--	--	--	--	--	--	--	--	310	--
	75-11-17	--	--	--	--	--	--	--	--	360	--
	76-03-01	--	--	--	--	--	--	--	--	1400	--
	76-03-17	--	--	--	--	--	--	--	--	550	--
	76-05-19	--	--	--	--	--	--	--	--	1100	--
430440089281001	76-08-17	--	--	--	--	--	--	--	0	--	4
DODGE COUNTY											
431829088430902	76-05-27	.01	--	4	30	0	--	0	20	1500	3
431850088473101	76-08-12	--	--	--	--	--	--	--	20	--	3
431852088321401	76-05-26	--	--	0	--	0	<10	0	0	--	3
432706088500602	76-05-27	.01	--	0	30	0	--	0	10	1100	2
433326088254301	76-05-27	--	--	0	--	0	10	0	0	--	1
433623088544501	76-05-27	.01	--	0	10	0	--	0	0	0	2
433652088545601	76-05-27	.10	--	4	20	0	--	6	20	140	2
DOOR COUNTY											
450955087132501	76-09-24	--	--	--	--	--	--	--	40	--	3
DOUGLAS COUNTY											
460955092141001	76-09-16	.04	--	2	110	0	--	2	0	50	0
461301092083001	76-08-12	.04	--	0	10	1	--	1	50	10	4
461301092091301	76-08-12	.02	--	0	40	1	--	1	10	40	11
461418091375201	76-05-21	--	--	0	--	0	<10	0	0	--	2
462215091483401	76-09-16	.02	--	2	40	0	--	1	0	10	0
462802091335901	76-09-01	--	--	--	--	--	--	--	0	--	1
463227091523201	76-09-01	--	--	--	--	--	--	--	0	--	2
463343092042001	76-05-21	--	--	0	--	0	<10	0	10	--	3
463428092071201	76-09-01	--	--	--	--	--	--	--	10	--	0
463906091384601	76-05-20	--	--	5	--	0	10	0	10	--	1
464337092060701	76-09-01	--	--	--	--	--	--	--	10	--	2
DUNN COUNTY											
444625091555401	76-05-17	--	--	0	--	0	10	0	0	--	1
445548092070001	76-09-03	--	--	--	--	--	--	--	10	--	2
EAU CLAIRE COUNTY											
443549091000501	76-09-03	--	--	--	--	--	--	--	90	--	3
FLORENCE COUNTY											
454607088275101	76-02-12	--	--	--	--	--	--	--	--	20	--
	76-05-26	--	--	--	--	--	--	--	--	70	--
454612088275901	75-10-24	--	--	--	--	--	--	--	--	0	--
	76-02-11	--	--	--	--	--	--	--	--	20	--
	76-05-26	--	--	--	--	--	--	--	--	30	--
454613088275701	75-10-24	--	--	--	--	--	--	--	--	0	--
FOND DU LAC COUNTY											
434339088255201	76-05-27	--	--	0	--	0	<10	0	0	--	1
434512088380101	76-06-04	.01	--	6	30	0	--	0	0	350	0
434515088243101	76-06-04	.01	--	0	650	0	--	0	0	70	0
435045088490901	76-08-03	.02	--	1	20	1	--	3	0	990	4
FOREST COUNTY											
453256088391801	76-05-26	--	--	5	--	2	<10	0	10	--	3
GRANT COUNTY											
423200090260601	76-05-28	.01	--	2	0	0	--	0	0	160	0
	76-07-02	.01	--	0	20	0	--	0	0	110	1
423522090255101	76-07-13	--	--	0	--	1	<10	0	10	--	4
423747090354901	76-05-28	.01	--	0	10	0	--	0	0	130	3

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED MANGANESE (MG/L)	TOTAL MERCURY (MG/L)	DIS-SOLVED MERCURY (MG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
CRAWFORD COUNTY											
431946090442701	76-05-25	--	--	<.5	2	0	0	10	1.4	--	--
DANE COUNTY											
425538089194201	76-07-15	--	--	<.5	5	1	0	330	--	--	--
425738089172201	76-08-02	60	.7	--	--	0	0	0	2.0	--	.0
425742089205001	76-05-26	--	--	<.5	8	0	0	110	11	--	--
425752089205001	76-07-15	--	--	<.5	6	1	0	80	--	--	--
425806089172701	76-08-02	40	<.5	--	--	0	0	10	4.4	--	.0
430055089242701	75-11-19	570	--	--	--	--	--	--	--	2.8	--
430057089245901	75-11-19	5	--	--	--	--	--	--	--	1.2	--
430108089242301	75-11-19	190	--	--	--	--	--	--	--	2.0	--
430245089260401	76-08-17	--	--	--	--	--	--	970	3.7	--	--
430359089360201	75-10-06	2500	--	--	--	--	--	--	--	9.8	--
	75-11-17	670	--	--	--	--	--	--	--	4.7	--
	76-03-01	2400	--	--	--	--	--	--	--	6.1	--
	76-03-17	710	--	--	--	--	--	--	--	15	--
	76-05-19	750	--	--	--	--	--	--	--	11	--
430440089281001	76-08-17	--	--	--	--	--	--	20	12	--	--
DODGE COUNTY											
431829088430902	76-05-27	30	<.5	--	--	0	0	20	--	6.2	.1
431850088473101	76-08-12	--	--	--	--	--	--	100	13	--	--
431852088321401	76-05-26	--	--	<.5	0	0	0	120	1.7	--	--
432706088500602	76-05-27	30	<.5	--	--	0	0	10	--	3.0	.0
433286088254301	76-05-27	--	--	<.5	0	0	0	200	8.8	--	--
433623088544501	76-05-27	30	<.5	--	--	0	0	80	--	2.0	.1
433652088545601	76-05-27	150	<.5	--	--	0	0	10	--	5.9	.0
DOOR COUNTY											
450955087132501	76-09-24	--	--	--	--	--	--	1600	--	--	--
DOUGLAS COUNTY											
460955092141001	76-09-16	130	<.5	--	--	0	0	30	--	2.8	.0
461301092083001	76-08-12	10	<.5	--	--	3	0	170	--	4.1	.1
461301092091301	76-08-12	10	<.5	--	--	1	0	550	--	3.3	.1
461418091375201	76-05-21	--	--	<.5	0	0	0	60	1.8	--	--
462215091483401	76-09-16	0	<.5	--	--	0	0	70	--	1.8	.0
462802091335901	76-09-01	--	--	--	--	--	--	1800	3.7	--	--
463227091523201	76-09-01	--	--	--	--	--	--	0	7.4	--	--
463343092042001	76-05-21	--	--	<.5	1	0	0	50	2.7	--	--
463428092071201	76-09-01	--	--	--	--	--	--	100	4.0	--	--
463906091384601	76-05-20	--	--	<.5	4	0	0	900	6.1	--	--
464337092060701	76-09-01	--	--	--	--	--	--	10	4.2	--	--
DUNN COUNTY											
444625091555401	76-05-17	--	--	--	1	0	0	0	2.8	--	--
445548092070001	76-09-03	--	--	--	--	--	--	1800	3.0	--	--
EAU CLAIRE COUNTY											
443549091000501	76-09-03	--	--	--	--	--	--	120	2.9	--	--
FLORENCE COUNTY											
454607088275101	76-02-12	30	--	--	--	--	--	--	--	19	--
	76-05-26	180	--	--	--	--	--	--	--	6.1	--
454612088275901	75-10-24	0	--	--	--	--	--	--	--	1.6	--
	76-02-11	10	--	--	--	--	--	--	--	11	--
	76-05-26	0	--	--	--	--	--	--	--	6.6	--
454613088275701	75-10-24	0	--	--	--	--	--	--	--	2.6	--
FOND DU LAC COUNTY											
434339088255201	76-05-27	--	--	<.5	0	0	0	0	11	--	--
434512088380101	76-06-04	20	<.5	--	--	0	0	0	--	14	.0
434515088243101	76-06-04	10	<.5	--	--	0	0	10	--	2.8	.1
435045088490901	76-08-03	40	<.5	--	--	0	0	10	2.7	--	.2
FOREST COUNTY											
453256088391801	76-05-26	--	--	<.5	2	0	0	40	6.8	--	--
GRANT COUNTY											
423200090260601	76-05-28	10	<.5	--	--	0	0	10	--	9.3	.1
	76-07-02	10	<.5	--	--	0	0	0	--	42	.0
423522090255101	76-07-13	--	--	<.5	5	0	0	610	--	--	--
423747090354901	76-05-28	20	<.5	--	--	0	0	10	--	2.3	.0

QUALITY OF GROUND WATER

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WATER QUALITY DATA. WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	LOCAL IDENTIFIER	AQUIFER	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPECIFIC CONDUCTANCE (MICROMHMS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
GRANT COUNTY									
424120090420201	GR-03/03W/35-0045	300SNDS	1054	76-07-02	610	6.5	12.5	300	13
424237090590101	GR-03/05W/29-0086	100SDGV	80	76-07-02	600	6.9	12.5	350	34
424244090591901	GR-03/05W/29-0032	300SNDS	853	76-07-02	560	6.7	13.0	250	6
425050090423201	GR-04/03W/03-0087	300SNDS	1706	76-05-28	590	7.5	12.0	310	33
425541090371901	GR-05/02W/09-0031	300SNDS	476	76-05-28	640	7.0	11.0	320	77
431117090181401	GR-08/02W/12-0097	100SDGV	20	76-05-25	230	6.3	9.0	--	--
GREEN COUNTY									
42305089291801	GN-01/08E/36-0062	300SNDS	191	76-07-13	630	7.6	12.5	--	--
423709089225501	GN-02/09E/25-0031	300SNDS	363	76-08-04	610	7.5	11.0	300	20
423710069225001	GN-02/09E/25-0021	100SDGV	147	76-05-26	560	7.3	13.0	310	19
423711089224701	GN-02/09E/25-0012	300SNDS	995	76-05-26	450	7.4	13.0	290	14
424447069353801	GN-03/08E/07-0015	300SNDS	422	76-06-03	570	7.5	12.5	300	13
GREEN LAKE COUNTY									
434039088563301	GL-14/13E/17-0043	300SNDS	110	76-06-02	640	7.1	9.5	--	--
435635089010001	GL-17/12E/13-0044	100SDGV	82	76-06-12	530	7.4	14.0	--	--
IOWA COUNTY									
425133090103202	IW-05/03E/31-0139	300SNDS	138	76-05-25	750	7.1	10.5	550	--
425145090111301	IW-05/03E/31-0012	300SNDS	853	76-07-01	840	6.4	9.5	390	140
425235090235301	IW-05/01E/29-0148	300SNDS	160	76-05-25	1220	7.1	10.5	580	220
425515090162401	IW-05/02E/08-0011	300SNDS	802	76-05-25	625	7.1	10.5	320	24
425548090235001	IW-05/01E/05-0044	300SNDS	405	76-05-24	550	7.8	13.0	300	15
430117090173201	IW-06/02E/06-0142	300SNDS	325	76-07-01	610	6.5	12.0	270	3
430132090172601	IW-06/02E/05-0141	300SNDS	72	76-07-01	240	5.0	10.0	54	10
430310090104501	IW-07/03E/30-0128	--	--	76-07-13	950	7.4	11.0	--	--
430943069562601	IW-08/05E/18-0110	300SNDS	188	76-05-25	460	7.2	10.5	--	--
430954069592901	IW-08/04E/14-0053	100SDGV	110	76-07-13	305	8.4	12.0	--	--
433032090121601	IW-07/02E/25-0131	300SNDS	275	76-05-25	770	6.7	9.5	--	--
IRON COUNTY									
462542090140001	IR-46/02E/34-0067	400BCPX	2860	76-08-31	1900	7.1	13.0	--	--
462646090314501	IR-46/01W/19-0006	100SDGV	99	76-08-31	470	7.8	14.5	--	--
462939090162201	IR-46/02E/05-0111	100SDGV	30	76-08-31	160	6.1	15.0	--	--
JACKSON COUNTY									
441830090490901	JA-21/04W/12-0036	300SNDS	140	76-06-20	130	--	11.0	--	--
442045090453601	JA-22/03W/33-0037	300SNDS	90	76-06-20	50	--	13.0	--	--
442443090444701	JA-22/03W/04-0012	300SNDS	32	76-08-20	810	--	16.0	--	--
442451090440601	JA-22/03W/03-0039	460BCPX	25	76-06-20	225	--	17.5	--	--
JEFFERSON COUNTY									
425512086464301	JE-05/14E/01-0291	300SNDS	310	76-06-02	630	7.4	13.0	320	14
425527088474501	JE-05/14E/01-0130	100SDGV	204	76-08-02	610	7.6	11.5	330	12
425616088442201	JE-06/15E/32-0213	300SNDS	146	76-06-12	640	7.2	11.5	--	--
430140088584501	JE-07/13E/32-0306	100SDGV	7.0	75-11-18	300	7.5	13.5	250	8
				76-02-27	505	6.7	5.5	210	0
430148088583001	JE-07/13E/32-0302	100SDGV	--	75-11-16	492	7.0	13.0	260	4
				76-02-27	310	6.5	12.0	170	11
				76-06-01	390	6.7	8.0	190	1
				76-05-26	230	6.5	11.5	150	0
431130086561001	JE-06/13E/03-0823	400BCPX	278	76-05-26	1500	7.0	10.5	--	--
JUNEAU COUNTY									
434814090024601	JU-15/04E/05-0066	100SDGV	103	76-06-11	150	6.6	14.5	--	--
441106069592601	JU-20/04E/23-0084	100SDGV	96	76-07-30	180	7.4	11.0	66	14
441241069593501	JU-20/04E/14-0100	100SDGV	95	76-07-30	210	7.3	11.0	68	1
KENOSHA COUNTY									
423127087491201	KE-01/23E/19-0031	350SLDL	105	76-06-31	305	8.0	13.0	--	--
423805068111601	KE-02/20E/18-0019	100SDGV	74	76-06-31	790	7.1	9.0	--	--
423907087521701	KE-02/22E/11-0006	300SNDS	1751	76-06-02	1580	6.7	13.0	--	--
KEWAUNEE COUNTY									
442450087322901	KW-22/24E/01-0012	350SLDL	132	76-06-08	430	6.4	6.5	--	--
LA CROSSE COUNTY									
435219091150601	LC-16/07W/07-0012	100SDGV	80	76-06-01	400	7.8	10.0	--	--
435356091040001	LC-17/06W/35-0041	380SNDS	310	76-08-10	420	7.0	12.5	--	--
LAFAYETTE COUNTY									
423112098145701	LF-01/02E/34-0077	300SNDS	345	76-05-26	910	6.8	10.5	--	--

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM AD-SORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
GRANT COUNTY											
424120090420201	76-07-02	60	36	1.3	1	.0	2.2	347	0	285	176
424237090590101	76-07-02	76	38	7.8	5	.2	1.7	381	0	313	77
424244090591901	76-07-02	53	29	6.1	5	.2	3.9	297	0	244	95
425050090423201	76-05-28	71	32	2.0	1	.1	1.5	336	0	276	17
425541090371901	76-05-28	81	28	2.2	1	.1	2.3	293	0	240	47
431117090101401	76-05-25	--	--	--	--	--	--	--	--	--	--
GREEN COUNTY											
423050089291801	76-07-13	--	--	--	--	--	--	--	--	--	--
423709089225501	76-08-04	54	40	2.0	1	.1	1.6	341	0	280	17
423710089225001	76-05-26	64	36	2.3	2	.1	.8	352	0	289	28
423711089224701	76-05-26	52	38	2.6	2	.1	1.6	332	0	272	21
424447089353801	76-06-03	58	37	1.2	1	.0	1.1	347	0	285	18
GREEN LAKE COUNTY											
434039088583301	76-06-02	--	--	--	--	--	--	--	--	--	--
435635089010001	76-08-12	--	--	--	--	--	--	--	--	--	--
IOWA COUNTY											
425133090103202	76-05-25	120	60	11	4	.2	1.3	--	0	--	--
425145090111301	76-07-01	80	46	9.9	5	.2	1.2	308	0	253	196
425235090235301	76-05-25	120	68	9.7	4	.2	1.6	444	0	364	56
425515090162401	76-05-25	70	36	2.0	1	.0	.5	365	0	299	46
425548090235001	76-05-24	61	37	1.1	1	.0	.9	353	0	290	9.0
430117090173201	76-07-01	59	30	1.9	2	.1	.7	326	0	267	165
430132090172601	76-07-01	12	5.9	2.8	10	.2	.9	54	0	44	864
430310090104501	76-07-13	--	--	--	--	--	--	--	--	--	--
430943089562601	76-05-25	--	--	--	--	--	--	--	--	--	--
430954089592901	76-07-13	--	--	--	--	--	--	--	--	--	--
433032090121601	76-05-25	--	--	--	--	--	--	--	--	--	--
IRON COUNTY											
462542090140001	76-08-31	--	--	--	--	--	--	--	--	--	--
462646090314501	76-08-31	--	--	--	--	--	--	--	--	--	--
462939090162201	76-08-31	--	--	--	--	--	--	--	--	--	--
JACKSON COUNTY											
441830090490901	76-08-20	--	--	--	--	--	--	--	--	--	--
442045090453601	76-08-20	--	--	--	--	--	--	--	--	--	--
442443090444701	76-08-20	--	--	--	--	--	--	--	--	--	--
442451090440801	76-08-20	--	--	--	--	--	--	--	--	--	--
JEFFERSON COUNTY											
425512088464301	76-08-02	55	45	6.3	4	.2	1.5	376	0	308	24
425527088474501	76-08-02	61	43	5.7	4	.1	1.0	387	0	317	16
425618088442201	76-08-12	--	--	--	--	--	--	--	--	--	--
4301400888584501	75-11-18	53	28	3.1	3	.1	.9	292	0	240	15
	76-02-27	48	23	3.0	3	.1	.7	299	0	245	95
4301480888583001	76-06-01	58	32	3.6	3	.1	1.0	332	0	272	53
	75-11-18	35	19	.6	1	.0	1.6	188	0	154	95
	76-02-27	41	21	.4	0	.0	1.7	229	0	188	73
	76-06-01	30	17	.3	0	.0	1.6	178	0	146	90
431130088561001	76-05-26	--	--	--	--	--	--	--	--	--	--
JUNEAU COUNTY											
434814090024601	76-08-11	--	--	--	--	--	--	--	--	--	--
441106089592601	76-07-30	16	6.3	1.4	4	.1	.5	63	0	52	4.0
441241089593501	76-07-30	17	6.3	1.8	5	.1	.5	82	0	67	6.6
KENOSHA COUNTY											
423127087491201	76-08-31	--	--	--	--	--	--	--	--	--	--
423805088111601	76-08-31	--	--	--	--	--	--	--	--	--	--
423907087521701	76-06-02	--	--	--	--	--	--	--	--	--	--
KEWAUNEE COUNTY											
442450087322901	76-06-08	--	--	--	--	--	--	--	--	--	--
LA CROSSE COUNTY											
435219891150801	76-06-01	--	--	--	--	--	--	--	--	--	--
435358091040001	76-08-10	--	--	--	--	--	--	--	--	--	--
LAFAYETTE COUNTY											
423112090145701	76-05-26	--	--	29	--	--	--	--	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED-PHOSPHORUS (P) (MG/L)	DIS-SOLVED-ALUMINUM (AL) (UG/L)	DIS-SOLVED-ARSENIC (AS) (UG/L)	DIS-SOLVED-BROMINE (B) (UG/L)	DIS-SOLVED-CADMIUM (CD) (UG/L)	DIS-SOLVED-CHROMIUM (CR) (UG/L)	DIS-SOLVED-COBALT (CO) (UG/L)	DIS-SOLVED-COPPER (CU) (UG/L)	DIS-SOLVED-IRON (FE) (UG/L)	DIS-SOLVED-LEAD (PB) (UG/L)
GRANT COUNTY											
424120090420201	76-07-02	.01	--	0	20	1	--	1	0	140	1
424237090590101	76-07-02	.02	--	0	50	1	--	0	0	0	1
424244090591901	76-07-02	.01	--	0	40	0	--	0	0	200	1
425050090423201	76-05-28	.42	--	0	20	0	--	0	0	110	2
425541090371901	76-05-28	.02	--	0	30	0	--	4	10	1500	3
431117090181401	76-05-25	--	--	0	--	0	20	0	0	--	2
GREEN COUNTY											
423050089291801	76-07-13	--	--	0	--	0	10	1	10	--	3
423709089225501	76-08-04	.01	--	0	10	0	--	0	0	80	2
423710089225001	76-05-26	.03	--	4	10	0	--	2	0	770	3
423711089224701	76-05-26	2.2	--	0	10	0	--	0	0	190	1
424447089353801	76-06-03	.01	--	0	10	0	--	1	0	210	3
GREEN LAKE COUNTY											
434039088583301	76-06-02	--	--	0	--	0	<10	0	0	--	1
435635089010001	76-08-12	--	--	--	--	--	--	--	10	--	1
IDWA COUNTY											
425133090103202	76-05-25	.02	--	0	0	0	--	0	10	0	1
425145090111301	76-07-01	.01	--	0	30	0	--	0	0	10	0
425235090235301	76-05-25	.01	--	0	10	0	--	0	10	30	1
425515090162401	76-05-25	.01	--	1	0	0	--	0	0	120	2
425548090235001	76-05-24	.01	--	0	0	0	--	0	0	50	1
430117090173201	76-07-01	.01	--	0	30	0	--	0	10	0	3
430132090172601	76-07-01	.02	--	0	10	1	--	0	0	10	1
430310090104501	76-07-13	--	--	0	--	1	<10	0	0	--	3
430943089562601	76-05-25	--	--	0	--	0	<10	1	0	--	2
430954089592901	76-07-13	--	--	0	--	0	<10	0	0	--	1
433032090121601	76-05-25	--	--	0	--	0	<10	0	0	--	0
IRON COUNTY											
462542090140001	76-08-31	--	--	--	--	--	--	--	20	--	2
462646090314501	76-08-31	--	--	--	--	--	--	--	0	--	5
462939090162201	76-08-31	--	--	--	--	--	--	--	30	--	2
JACKSON COUNTY											
441830090490901	76-08-20	--	--	--	--	--	--	--	100	--	26
442045090453601	76-08-20	--	--	--	--	--	--	--	110	--	2
442443090444701	76-08-20	--	--	--	--	--	--	--	30	--	6
442451090440801	76-08-20	--	--	--	--	--	--	--	60	--	4
JEFFERSON COUNTY											
425512088464301	76-08-02	.01	--	1	20	1	--	1	0	1400	2
425527088474501	76-08-02	.03	--	1	20	1	--	1	0	280	2
425618088442201	76-08-12	--	--	--	--	--	--	--	20	--	3
430140088584501	75-11-18	--	--	--	--	--	--	--	--	10	--
	76-02-27	--	--	--	--	--	--	--	--	1200	--
430148088583001	76-06-01	--	--	--	--	--	--	--	--	2000	--
	75-11-18	--	--	--	--	--	--	--	--	1800	--
	76-02-27	--	--	--	--	--	--	--	--	2000	--
431130088561001	76-06-01	--	--	--	--	--	--	--	--	2800	--
	76-05-26	--	--	0	--	0	<10	0	10	--	2
JUNEAU COUNTY											
434814090024601	76-08-11	--	--	--	--	--	--	--	50	--	2
441196089592601	76-07-30	.02	--	1	10	0	--	1	0	530	1
441241089593501	76-07-30	.01	--	1	20	0	--	1	0	3100	3
KENOSHA COUNTY											
423127087491201	76-08-31	--	10	1	--	2	<10	0	0	--	0
423895088111601	76-08-31	--	10	1	--	1	<10	4	0	--	0
423907087521701	76-06-02	--	--	1	--	1	<10	0	0	--	5
KEWAUNEE COUNTY											
442450087322901	76-06-08	--	--	2	--	1	<10	0	10	--	3
LA CROSSE COUNTY											
435219091150801	76-06-01	--	--	0	--	0	<10	0	0	--	1
435358091040001	76-08-10	--	--	--	--	--	--	--	50	--	0
LAFAYETTE COUNTY											
423112090145701	76-05-26	--	--	0	--	0	<10	0	0	--	1

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
GRANT COUNTY											
424120090420201	76-07-02	10	<.5	--	--	0	0	10	--	23	.0
424237090590101	76-07-02	0	<.5	--	--	0	0	20	--	21	.0
424244090591901	76-07-02	10	<.5	--	--	0	0	0	--	7.3	.0
425050090423201	76-05-28	10	<.5	--	--	0	0	0	--	3.7	.0
425541090371901	76-05-28	80	<.5	--	--	0	0	110	--	6.6	.1
431117090181401	76-05-25	--	--	<.5	1	0	0	310	13	--	--
GREEN COUNTY											
423056089291801	76-07-13	--	--	<.5	3	1	0	20	3.6	--	--
423709089225501	76-08-04	30	<.5	--	--	1	0	10	--	--	.0
423710069225001	76-05-26	60	<.5	--	--	0	0	30	--	1.7	.0
423711889224701	76-05-26	10	<.5	--	--	0	0	10	--	5.6	.1
424447089353801	76-06-03	0	<.5	--	--	0	0	10	--	5.0	.0
GREEN LAKE COUNTY											
434039088583301	76-06-02	--	--	<.5	1	0	0	30	4.1	--	--
435635089010001	76-08-12	--	--	--	--	--	--	40	4.8	--	--
IOWA COUNTY											
425133090103202	76-05-25	0	<.5	--	--	0	0	70	--	3.4	--
425145090111301	76-07-01	0	<.5	--	--	0	0	110	--	11	.0
425235090235301	76-05-25	0	<.5	--	--	0	0	280	--	3.2	--
425515090162401	76-05-25	10	<.5	--	--	0	0	10	--	4.7	--
425548090235001	76-05-24	0	<.5	--	--	0	0	10	--	10	--
430117090173201	76-07-01	0	<.5	--	--	0	0	1600	--	6.0	.0
430132090172601	76-07-01	10	<.5	--	--	0	0	1900	--	4.1	.0
430310090104501	76-07-13	--	--	<.5	1	1	0	90	--	--	--
430943089562601	76-05-25	--	--	<.5	0	0	0	60	8.1	--	--
430954089592901	76-07-13	--	--	<.5	1	1	0	0	1.6	--	--
433032090121601	76-05-25	--	--	<.5	0	0	0	0	2.2	--	--
IRON COUNTY											
462542090140001	76-08-31	--	--	--	--	--	--	80	6.3	--	--
462646090314501	76-08-31	--	--	--	--	--	--	60	2.9	--	--
462939090162201	76-08-31	--	--	--	--	--	--	150	9.0	--	--
JACKSON COUNTY											
441830090490901	76-08-20	--	--	--	--	--	--	90	.9	--	--
442045090453601	76-08-20	--	--	--	--	--	--	50	2.0	--	--
442443090444701	76-08-20	--	--	--	--	--	--	80	3.6	--	--
442451090440801	76-08-20	--	--	--	--	--	--	340	.2	--	--
JEFFERSON COUNTY											
425512088444301	76-08-02	80	<.5	--	--	0	0	0	2.2	--	.2
425527088474501	76-08-02	60	<.5	--	--	0	0	30	2.2	--	.0
425618088442201	76-08-12	--	--	--	--	--	--	290	12	--	--
430140088584501	75-11-18	180	--	--	--	--	--	--	--	5.3	--
	76-02-27	240	--	--	--	--	--	--	--	15	--
430148088583001	76-06-01	200	--	--	--	--	--	--	--	6.0	--
	75-11-18	280	--	--	--	--	--	--	--	22	--
	76-02-27	300	--	--	--	--	--	--	--	31	--
	76-06-01	170	--	--	--	--	--	--	--	26	--
431130088561081	76-05-26	--	--	<.5	0	0	0	70	3.1	--	--
JUNEAU COUNTY											
434814090024601	76-08-11	--	--	--	--	--	--	410	2.2	--	--
441106089592601	76-07-30	60	<.5	--	--	0	0	10	2.6	--	.0
441241089593501	76-07-30	180	<.5	--	--	0	0	10	--	3.5	.0
KENOSHA COUNTY											
423127087491201	76-08-31	0	--	--	0	--	0	0	2.9	--	--
423805088111601	76-08-31	30	--	--	6	--	0	0	3.0	--	--
423987087521701	76-06-02	--	--	<.5	2	0	0	100	1.2	--	--
KEWAUNEE COUNTY											
442450087322901	76-06-08	--	--	<.5	0	0	0	40	3.1	--	--
LA CROSSE COUNTY											
435219091150801	76-06-01	--	--	<.5	0	0	0	0	1.0	--	--
435358091040001	76-08-10	--	--	--	--	--	--	80	8.2	--	--
LAFAYETTE COUNTY											
423112090145701	76-05-26	--	--	<.5	0	0	0	6600	9.8	--	--

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	LOCAL IDENTIFIER	AQUIFER	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
LAFAYETTE COUNTY									
423157090112801	LF-01/03E/30-0180	300SNDS	100	76-05-24	1100	7.2	10.5	420	110
423157090112901	LF-01/02E/25-0181	362MQKS	68	76-05-24	1050	7.2	13.0	550	250
423400090132002	LF-01/02E/11-0062	300SNDS	687	76-05-24	625	7.4	11.5	300	77
423434090140201	LF-01/02E/11-0305	--	--	76-05-24	600	7.4	11.5	350	24
423435090210901	LF-01/01E/10-0306	300SNDS	220	76-05-26	590	6.9	10.0	--	--
423446090135301	LF-01/02E/10-0304	300SNDS	285	76-07-02	990	6.5	11.0	460	140
424615089581801	LF-04/04E/35-0307	100SDGV	80	76-05-24	650	7.1	10.5	290	19
LANGLADE COUNTY									
451230089012201	LA-32/12E/32-0464	100SDGV	89	76-05-26	420	7.8	10.5	--	--
MANITOWOC COUNTY									
440430087420401	MN-19/23E/35-0028	350SLDL	147	76-06-07	550	6.7	9.3	--	--
441432087323901	MN-21/24E/35-0055	100SDGV	124	76-09-24	1480	8.0	12.0	--	--
MARINETTE COUNTY									
450322087435401	MT-30/23E/20-0015	300SNDS	728	76-07-28	810	7.4	9.0	270	83
450356087413901	MT-30/23E/15-0031	300SNDS	395	76-05-27	1540	7.6	11.0	--	--
450502087372401	MT-30/24E/07-0181	300SNDS	750	76-07-29	390	7.4	13.0	150	0
450549087365401	MT-30/24E/05-0185	300SNDS	386	76-07-29	1680	7.5	11.0	710	590
450556087364601	MT-30/24E/05-0183	300SNDS	625	76-07-29	920	7.4	10.5	310	43
453442087512201	MT-36/21E/22-0037	100SDGV	78	76-05-27	475	7.7	11.5	--	--
453811087572001	MT-37/20E/36-0189	400BCPX	146	76-05-27	425	7.8	10.0	--	--
MARQUETTE COUNTY									
435009089244401	HQ-16/09E/36-0048	100SDGV	136	76-08-11	455	7.4	15.0	--	--
435110089243801	HQ-16/09E/22-0022	300SNDS	90	76-08-11	350	7.3	17.0	--	--
MILWAUKEE COUNTY									
430109087595301	ML-07/21E/34-0022	300SDSL	1690	76-09-01	1050	7.0	14.5	--	--
430350088023901	ML-07/21E/17-0455	300SNDS	1750	76-09-01	910	7.1	14.0	--	--
OCONTO COUNTY									
445324088184401	OC-28/18E/21-0009	300SNDS	--	76-07-29	530	7.6	9.0	220	0
445328087530001	OC-28/22E/18-0160	300SNDS	599	76-07-28	460	7.8	11.0	170	82
445347088175201	OC-28/18E/22-0013	100SDGV	250	76-07-29	580	7.8	9.5	260	15
ONEIDA COUNTY									
454738089192301	ON-38/09E/11-0019	100SDGV	60	76-05-26	180	6.7	10.5	--	--
455021089401604	ON-39/07E/30-0042	--	--	76-02-10	72	5.9	6.5	6	0
				76-05-26	62	5.5	9.0	5	0
455021089401605	ON-39/07E/30-0043	--	--	76-02-10	55	5.8	3.0	26	17
				76-05-26	40	5.5	9.0	10	0
455120089405301	ON-39/06E/24-0044	--	--	76-01-06	240	7.3	4.0	--	--
455120089405302	ON-39/06E/24-0045	100SDGV	--	76-01-08	240	6.5	--	--	--
				76-02-09	280	7.9	4.5	120	11
OZAUKEE COUNTY									
432459087595701	OZ-11/21E/16-0058	350SLDL	420	75-10-24	550	7.6	10.5	280	13
PEPIN COUNTY									
443746091572301	PP-25/13W/21-0021	300SNDS	279	76-08-03	460	7.4	10.5	240	36
444043091535701	PP-25/13W/01-0043	100SDGV	67	76-08-03	340	7.4	10.5	110	84
PIERCE COUNTY									
444623092382101	PI-26/19W/01-0063	300SNDS	101	76-09-03	610	7.5	11.0	--	--
POLK COUNTY									
452105092365901	PK-33/18W/17-0120	100SDGV	140	76-08-18	180	--	19.5	79	11
452107092375401	PK-33/18W/18-0121	300SNDS	259	76-08-18	330	--	11.0	160	23
452232092400601	PK-33/19W/01-0086	300SNDS	700	76-05-25	1000	7.2	9.0	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED-PHOSPHORUS (P) (MG/L)	DIS-SOLVED-ALUMINUM (AL) (UG/L)	DIS-SOLVED-ARSENIC (AS) (UG/L)	DIS-SOLVED-BORON (B) (UG/L)	DIS-SOLVED-CADMIUM (CD) (UG/L)	DIS-SOLVED-CHROMIUM (CR) (UG/L)	DIS-SOLVED-COBALT (CO) (UG/L)	DIS-SOLVED-COPPER (CU) (UG/L)	DIS-SOLVED-IRON (FE) (UG/L)	DIS-SOLVED-LEAD (PB) (UG/L)
LAFAYETTE COUNTY											
423157090112801	76-05-24	.01	--	0	20	1	--	12	10	530	3
423157090112901	76-05-24	.01	--	0	20	4	--	1	10	10	2
423400090132002	76-05-24	.01	--	5	0	0	--	13	0	20	3
423434090140201	76-05-24	.01	--	0	40	0	--	0	10	550	4
423435090210901	76-05-26	--	--	0	--	0	<10	0	0	--	1
423446090135301	76-07-02	.01	--	5	30	1	--	20	10	0	1
424615009501601	76-05-24	.01	--	2	0	0	--	10	0	0	2
LANGLADE COUNTY											
451230089012201	76-05-26	--	--	0	--	1	<10	0	30	--	3
MANITOWOC COUNTY											
440430087420401	76-06-07	--	--	2	--	1	10	1	10	--	4
441432087323901	76-09-24	--	--	--	--	--	--	--	0	--	1
MARINETTE COUNTY											
450322087435401	76-07-28	.05	--	1	130	1	--	1	0	1400	7
450356087413901	76-05-27	--	--	0	--	3	<10	0	10	--	4
450502087372401	76-07-29	.04	--	1	60	1	--	1	0	2300	4
450549087365401	76-07-29	.03	--	20	220	0	--	0	0	130	4
450556087364601	76-07-29	.31	--	250	110	0	--	0	0	1400	2
453442087512201	76-05-27	--	--	0	--	0	<10	0	10	--	2
453011007572001	76-05-27	--	--	0	--	0	<10	0	10	--	3
MARQUETTE COUNTY											
435009089244401	76-08-11	--	--	--	--	--	--	--	30	--	3
435110089243801	76-08-11	--	--	--	--	--	--	--	30	--	1
MILWAUKEE COUNTY											
430109087595301	76-09-01	--	10	0	--	1	<10	0	10	--	0
43035008023901	76-09-01	--	10	0	--	2	<10	0	0	--	1
OCONTO COUNTY											
445324080104401	76-07-29	.01	--	3	30	0	--	1	0	70	2
445332087530001	76-07-28	.03	--	0	130	0	--	0	0	0	2
445347080175201	76-07-29	.05	--	3	10	0	--	1	0	320	0
ONEIDA COUNTY											
454730809192301	76-05-26	--	--	0	--	0	<10	0	30	--	3
455021089401604	76-02-10	--	--	--	--	--	--	--	--	5200	--
	76-05-26	--	--	--	--	--	--	--	--	3600	--
455021089401605	76-02-10	--	--	--	--	--	--	--	--	5300	--
	76-05-26	--	--	--	--	--	--	--	--	4200	--
455120089405301	76-01-06	--	--	--	--	--	--	--	--	--	--
455120089405302	76-01-08	--	--	--	--	--	--	--	--	--	--
	76-02-09	--	--	--	--	--	--	--	--	30	--
OZAUKEE COUNTY											
432459087595701	75-10-24	--	--	--	--	--	--	--	--	190	--
PEPIN COUNTY											
443746091572301	76-08-03	.03	--	0	20	2	--	0	0	440	3
444043091535701	76-08-03	.51	--	0	30	3	--	2	0	20	6
PIERCE COUNTY											
444623092302101	76-09-03	--	--	--	--	--	--	--	20	--	0
POLK COUNTY											
452105092365901	76-08-18	.01	--	0	10	1	--	0	60	20	6
452107092375401	76-08-18	.04	--	0	0	0	--	0	10	0	1
452232092400601	76-05-25	--	--	0	--	2	40	0	70	--	2

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED MANGANESE (MG) (UG/L)	TOTAL MERCURY (MG) (UG/L)	DIS-SOLVED MERCURY (MG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
LAFAYETTE COUNTY											
423157090112801	76-05-24	30	<.5	--	--	0	0	260	--	6.1	--
423157090112901	76-05-24	0	<.5	--	--	0	0	1200	--	5.4	--
423400090132002	76-05-24	0	<.5	--	--	5	0	10	--	3.4	--
423434090140201	76-05-24	30	<.5	--	--	0	0	340	--	7.2	.0
423435090210901	76-05-26	--	--	<.5	0	0	0	100	6.1	--	--
423446090135301	76-07-02	20	<.5	--	--	0	0	220	--	10	.1
424615089581801	76-05-24	10	<.5	--	--	0	0	10	--	5.4	--
LANGLADE COUNTY											
451230089012201	76-05-26	--	--	<.5	1	0	0	180	2.6	--	--
MANITOWOC COUNTY											
440430087420401	76-06-07	--	--	<.5	1	0	0	70	1.2	--	--
441432087323901	76-09-24	--	--	--	--	--	--	0	--	--	--
MARINETTE COUNTY											
450322087435401	76-07-28	50	<.5	--	--	0	0	10	--	--	.1
450356087413901	76-05-27	--	--	<.5	3	0	0	4400	--	--	--
450502087372401	76-07-29	90	<.5	--	--	0	0	10	7.3	--	.0
450549087365401	76-07-29	60	<.5	--	--	0	0	10	2.5	--	.0
450556087364601	76-07-29	290	<.5	--	--	0	0	20	10	--	.1
453442087512201	76-05-27	--	--	<.5	1	0	0	160	2.2	--	--
453811087572001	76-05-27	--	--	<.5	0	0	0	20	6.8	--	--
MARQUETTE COUNTY											
435009089244401	76-08-11	--	--	--	--	--	--	150	11	--	--
435110089243801	76-08-11	--	--	--	--	--	--	60	9.4	--	--
MILWAUKEE COUNTY											
430109087595301	76-09-01	30	--	--	0	--	0	150	3.6	--	--
430350086023901	76-09-01	30	--	--	1	--	0	0	6.3	--	--
OCONTO COUNTY											
445324086184401	76-07-29	0	<.5	--	--	0	0	0	--	--	.0
445332087530001	76-07-28	0	--	--	--	0	0	10	2.3	--	.6
445347088175201	76-07-29	20	<.5	--	--	0	0	10	2.2	--	.0
ONEIDA COUNTY											
454738089192301	76-05-26	--	--	<.5	0	0	0	210	1.3	--	--
455021089401604	76-02-10	80	--	--	--	--	--	--	--	16	--
	76-05-26	80	--	--	--	--	--	--	--	13	--
455021089401605	76-02-10	50	--	--	--	--	--	--	--	23	--
	76-05-26	60	--	--	--	--	--	--	--	23	--
455120069405301	76-01-06	--	--	--	--	--	--	--	--	7.4	--
455120089405302	76-01-08	--	--	--	--	--	--	--	--	22	--
	76-02-09	60	--	--	--	--	--	--	--	6.1	--
OZAUKEE COUNTY											
432459087595701	75-10-24	10	--	--	--	--	--	--	--	--	--
PEPIN COUNTY											
443746091572301	76-08-03	70	<.5	--	--	0	0	0	--	2.8	.0
444043091535701	76-08-03	40	<.5	--	--	0	0	110	--	4.0	.2
PIERCE COUNTY											
444623092382101	76-09-03	--	--	--	--	--	--	300	4.2	--	--
POLK COUNTY											
452105092365901	76-08-18	20	<.5	--	--	0	0	2800	--	2.4	.0
452107092375401	76-08-18	0	<.5	--	--	0	0	10	--	4.9	.1
452232092400601	76-05-25	--	--	.6	2	0	0	110	1.9	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	LOCAL IDENTIFIER	AQUIFER	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
PORTAGE COUNTY									
441649089304901	PT-21/08E/23-0696	100SDGV	14	75-10-24	210	7.8	13.0	110	15
441649089304902	PT-21/08E/23-0753	100SDGV	28	75-10-24	220	8.0	10.0	120	13
441649089304903	PT-21/08E/23-0752	100SDGV	49	75-10-24	60	6.4	10.0	24	0
441651089325501	PT-21/08E/22-0758	100SDGV	14	75-10-24	190	8.5	12.5	84	38
441702089314301	PT-21/08E/22-0754	100SDGV	40	75-10-24	500	7.9	10.0	240	120
441716089321901	PT-21/08E/22-0757	100SDGV	14	75-10-24	90	6.8	13.0	30	12
				75-11-14	90	--	11.0	--	--
				75-12-22	85	6.6	9.0	--	--
				76-03-16	90	--	6.5	--	--
441716089321902	PT-21/08E/22-0756	100SDGV	42	75-10-24	560	8.2	11.0	260	180
441716089321903	PT-21/08E/22-0755	100SDGV	70	76-06-17	479	--	9.5	240	150
				75-10-24	280	8.3	10.5	130	59
				75-11-14	280	--	9.5	--	--
				75-12-22	295	6.8	8.0	--	--
				76-03-16	320	7.7	9.0	--	--
441742089314401	PT-21/08E/15-0701	100SDGV	10	75-10-24	105	5.8	14.0	30	22
441742089321901	PT-21/08E/15-0759	100SDGV	14	75-10-24	90	6.0	12.0	29	4
441743089325701	PT-21/08E/16-0700	100SDGV	14	75-10-24	130	5.6	14.0	48	38
441807089325601	PT-21/08E/15-0762	100SDGV	14	75-10-24	280	7.1	12.0	140	42
441807089325602	PT-21/08E/15-0761	100SDGV	34	75-10-24	440	7.0	11.0	200	150
441807089325603	PT-21/08E/15-0760	100SDGV	70	75-10-24	240	8.0	10.0	120	29
441909089400301	PT-21/07E/10-0194	100SDGV	13	75-10-23	140	6.8	13.5	56	1
441936089400301	PT-21/07E/03-0783	100SDGV	14	75-10-23	145	6.4	11.5	33	17
				75-11-14	140	--	10.5	--	--
				75-12-22	215	6.7	7.5	--	--
441936089400302	PT-21/07E/03-0782	100SDGV	34	75-10-23	175	7.1	9.5	70	12
441936089400303	PT-21/07E/03-0781	100SDGV	70	75-10-23	240	7.0	9.5	120	17
				75-11-14	240	--	0.0	--	--
				75-12-22	130	6.3	8.0	--	--
441938089411501	PT-21/07E/04-0780	100SDGV	14	75-10-23	100	6.3	11.5	26	19
441942089422901	PT-21/07E/06-0779	100SDGV	14	75-10-23	50	5.5	13.0	14	11
442009089432701	PT-21/07E/06-0775	100SDGV	14	75-10-23	295	6.9	10.5	130	22
				75-11-14	280	--	9.5	--	--
				75-12-22	280	8.1	9.0	--	--
				76-03-16	295	6.2	6.0	--	--
442009089432702	PT-21/07E/06-0776	100SDGV	33	76-06-17	218	--	7.5	130	15
442009089432703	PT-21/07E/06-0777	100SDGV	70	75-10-23	290	6.9	9.5	140	22
				75-10-23	300	7.4	9.5	130	16
442329089282001	PT-22/09E/18-0591	100SDGV	106	76-05-25	360	7.3	11.5	--	--
442437089385201	PT-22/07E/03-0763	100SDGV	14	75-10-24	115	5.8	13.0	28	12
442437089385202	PT-22/07E/03-0764	100SDGV	28	75-10-23	60	5.6	10.5	9	0
442437089385203	PT-22/07E/03-0765	100SDGV	55	75-10-23	140	8.0	10.0	68	0
442450089400301	PT-22/07E/03-0774	100SDGV	14	75-10-23	290	5.7	13.0	65	53
				75-11-14	215	--	11.5	--	--
				75-12-22	305	5.9	9.0	--	--
				76-03-16	225	5.0	5.5	--	--
442516089392701	PT-22/07E/03-0768	100SDGV	14	75-10-23	280	6.1	12.5	86	77
442516089392702	PT-22/07E/03-0767	100SDGV	28	75-10-23	410	5.9	10.5	150	150
442516089392703	PT-22/07E/03-0766	100SDGV	50	75-10-23	300	7.5	11.5	130	85
442528089385001	PT-22/07E/02-0772	100SDGV	14	75-10-23	50	6.5	12.0	8	2
442529089400301	PT-23/07E/34-0773	100SDGV	14	75-10-23	190	5.4	13.0	66	56
442554089395701	PT-23/07E/34-0771	100SDGV	14	75-10-23	90	5.9	12.0	31	22
				75-11-14	70	--	11.5	--	--
				75-12-22	80	6.3	10.0	--	--
442554089395702	PT-23/07E/34-0770	100SDGV	29	75-10-23	440	5.5	10.0	170	160
				76-06-17	--	6.3	9.5	120	100
442554089395703	PT-23/07E/34-0769	100SDGV	70	75-10-23	225	6.8	11.5	74	57
				75-11-14	220	--	9.5	--	--
				75-12-22	220	6.8	8.0	--	--
442850089290101	PT-23/09E/18-0279	100SDGV	87	76-05-25	340	7.8	10.0	--	--

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED ORGANIC PHOS-PHORUS (P) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	DIS-SOLVED COGALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)
PORTAGE COUNTY											
441649089304901	75-10-24	--	--	10	--	--	--	--	110	--	--
441649089304902	75-10-24	--	--	10	--	--	--	--	20	--	--
441649089304903	75-10-24	--	--	0	--	--	--	--	190	--	--
441651089325501	75-10-24	--	--	10	--	--	--	--	0	--	--
441702089314301	75-10-24	--	--	0	--	--	--	--	20	--	--
441716089321901	75-10-24	.00	0	30	0	0	0	--	10	0	0
	75-11-14	--	--	--	--	--	--	--	20	--	--
	75-12-22	--	--	--	--	--	--	--	0	--	--
	76-03-16	--	--	--	--	--	--	--	20	--	--
441716089321902	75-10-24	.00	1	50	0	0	0	--	10	0	0
	76-06-17	--	0	10	0	0	0	0	40	2	--
441716089321903	75-10-24	.00	0	10	0	0	0	--	0	0	0
	75-11-14	--	--	--	--	--	--	--	30	--	--
	75-12-22	--	--	--	--	--	--	--	20	--	--
	76-03-16	--	--	--	--	--	--	--	30	--	--
441742089314401	75-10-24	--	--	5	--	--	--	--	100	--	--
441742089321901	75-10-24	--	--	20	--	--	--	--	150	--	--
441743089325701	75-10-24	--	--	30	--	--	--	--	330	--	--
441807089325601	75-10-24	--	--	0	--	--	--	--	10	--	--
441807089325602	75-10-24	--	--	260	--	--	--	--	20	--	--
441807089325603	75-10-24	--	--	0	--	--	--	--	40	--	--
441909089400301	75-10-23	--	--	50	--	--	--	--	7900	--	--
441936089400301	75-10-23	.00	1	20	2	18	2	--	14000	0	2
	75-11-14	--	--	--	--	--	--	--	14000	--	--
	75-12-22	--	--	--	--	--	--	--	15000	--	--
441936089400302	75-10-23	.00	2	30	2	10	2	--	8600	5	0
441936089400303	75-10-23	.00	2	50	2	8	2	--	7600	3	2
	75-11-14	--	--	--	--	--	--	--	8100	--	--
	75-12-22	--	--	--	--	--	--	--	8000	--	--
441936089411501	75-10-23	--	--	0	--	--	--	--	12000	--	--
441942089422901	75-10-23	--	--	0	--	--	--	--	330	--	--
442009089432701	75-10-23	--	--	40	--	--	--	--	17000	--	--
	75-11-14	--	--	--	--	--	--	--	16000	--	--
	75-12-22	--	--	--	--	--	--	--	17000	--	--
	76-03-16	--	--	--	--	--	--	--	18000	--	--
	76-06-17	--	0	40	0	33	0	0	18000	3	--
442009089432702	75-10-23	--	--	40	--	--	--	--	16000	--	--
442009089432703	75-10-23	--	--	20	--	--	--	--	23000	--	--
442329089282001	76-05-25	--	0	--	0	--	0	0	--	0	--
442437089385201	75-10-24	--	--	0	--	--	--	--	540	--	--
442437089385202	75-10-23	--	--	10	--	--	--	--	140	--	--
442437089385203	75-10-23	--	--	0	--	--	--	--	40	--	--
442450089400301	75-10-23	--	--	50	--	--	--	--	60	--	--
	75-11-14	--	--	--	--	--	--	--	40	--	--
	75-12-22	--	--	--	--	--	--	--	30	--	--
	76-03-16	--	--	--	--	--	--	--	30	--	--
442516089392701	75-10-23	.00	0	10	0	0	0	--	40	2	0
442516089392702	75-10-23	.00	0	20	0	0	0	--	10	0	1
442516089392703	75-10-23	.00	0	10	0	0	0	--	60	0	0
442528089385001	75-10-23	--	--	20	--	--	--	--	90	--	--
442529089400301	75-10-23	--	--	20	--	--	--	--	40	--	--
442554089395701	75-10-23	--	--	0	--	--	--	--	10	--	--
	75-11-14	--	--	--	--	--	--	--	20	--	--
	75-12-22	--	--	--	--	--	--	--	10	--	--
442554089395702	75-10-23	--	--	20	--	--	--	--	10	--	--
	76-06-17	--	0	0	0	0	0	0	40	2	--
442554089395703	75-10-23	--	--	0	--	--	--	--	290	--	--
	75-11-14	--	--	--	--	--	--	--	300	--	--
	75-12-22	--	--	--	--	--	--	--	70	--	--
442850089290101	76-05-25	--	0	--	1	--	0	10	--	0	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED MANGANESE (MG/L)	TOTAL MERCURY (UG/L)	DIS-SOLVED MERCURY (UG/L)	DIS-SOLVED MOLYB- DENUM (MO) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED SELE- NIUM (SE) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	SOL- VED ORGANIC CARBON (C) (MG/L)
PORTAGE COUNTY											
441649889304981	75-10-24	4	--	--	--	--	--	--	--	--	6.2
441649889304902	75-10-24	6	--	--	--	--	--	--	--	--	4.2
441649889304903	75-10-24	10	--	--	--	--	--	--	--	--	3.2
441651089325501	75-10-24	0	--	--	--	--	--	--	--	--	8.0
441702089314301	75-10-24	10	--	--	--	--	--	--	--	--	4.8
441716089321901	75-10-24	0	--	<.5	0	--	0	--	220	--	2.8
	75-11-14	--	--	--	--	--	--	--	--	--	--
	75-12-22	--	--	--	--	--	--	--	--	--	--
	76-03-16	--	--	--	--	--	--	--	--	--	--
441716089321902	75-10-24	0	--	<.5	0	--	0	--	250	--	1.6
441716089321903	76-06-17	0	.5	--	--	--	0	0	220	--	--
	75-10-24	10	--	<.5	0	--	0	--	120	--	1.0
	75-11-14	--	--	--	--	--	--	--	--	--	--
	75-12-22	--	--	--	--	--	--	--	--	--	--
	76-03-16	--	--	--	--	--	--	--	--	--	--
441742089314401	75-10-24	0	--	--	--	--	--	--	--	--	8.8
441742089321901	75-10-24	30	--	--	--	--	--	--	--	--	5.6
441743089325701	75-10-24	10	--	--	--	--	--	--	--	--	1.0
441807089325601	75-10-24	0	--	--	--	--	--	--	--	--	19
441807089325602	75-10-24	0	--	--	--	--	--	--	--	--	1.8
441807089325603	75-10-24	0	--	--	--	--	--	--	--	--	5.2
441909089400301	75-10-23	140	--	--	--	--	--	--	--	--	8.0
441936089400301	75-10-23	50	--	<.5	0	--	0	--	200	--	6.2
	75-11-14	--	--	--	--	--	--	--	--	--	--
	75-12-22	--	--	--	--	--	--	--	--	--	--
441936089400302	75-10-23	70	--	<.5	1	--	0	--	560	--	5.4
441936089400303	75-10-23	170	--	<.5	0	--	0	--	550	--	14
	75-11-14	--	--	--	--	--	--	--	--	--	--
	75-12-22	--	--	--	--	--	--	--	--	--	--
441936089411501	75-10-23	60	--	--	--	--	--	--	--	--	15
441942089422901	75-10-23	10	--	--	--	--	--	--	--	--	1.8
442069089432701	75-10-23	150	--	--	--	--	--	--	--	--	9.0
	75-11-14	--	--	--	--	--	--	--	--	--	--
	75-12-22	--	--	--	--	--	--	--	--	--	--
	76-03-16	--	--	--	--	--	--	--	--	--	--
	76-06-17	150	<.5	--	--	--	0	0	50	--	--
442009089432702	75-10-23	150	--	--	--	--	--	--	--	--	11
442009089432703	75-10-23	200	--	--	--	--	--	--	--	--	12
442329089282001	76-05-25	--	--	<.5	--	0	0	0	70	1.5	--
442437089385201	75-10-24	50	--	--	--	--	--	--	--	--	--
442437089385202	75-10-23	30	--	--	--	--	--	--	--	--	6.0
442437089385203	75-10-23	0	--	--	--	--	--	--	--	--	11
442450089400301	75-10-23	10	--	--	--	--	--	--	--	--	5.4
	75-11-14	--	--	--	--	--	--	--	--	--	--
	75-12-22	--	--	--	--	--	--	--	--	--	--
	76-03-16	--	--	--	--	--	--	--	--	--	--
442516089392701	75-10-23	70	--	<.5	0	--	0	--	1200	--	3.4
442516089392702	75-10-23	360	--	<.5	0	--	0	--	220	--	2.0
442516089392703	75-10-23	10	--	<.5	0	--	0	--	240	--	2.8
442528089385001	75-10-23	10	--	--	--	--	--	--	--	--	3.4
442529089400301	75-10-23	90	--	--	--	--	--	--	--	--	9.0
442554089395701	75-10-23	8	--	--	--	--	--	--	--	--	1.0
	75-11-14	--	--	--	--	--	--	--	--	--	--
	75-12-22	--	--	--	--	--	--	--	--	--	--
442554089395702	75-10-23	90	--	--	--	--	--	--	--	--	2.2
	76-06-17	60	<.5	--	--	--	0	0	440	--	--
442554089395703	75-10-23	20	--	--	--	--	--	--	--	--	8.6
	75-11-14	--	--	--	--	--	--	--	--	--	--
	75-12-22	--	--	--	--	--	--	--	--	--	--
442850089290101	76-05-25	--	--	<.5	--	3	0	0	100	12	--

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	LOCAL IDENTIFIER	AQUIFER	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
PRICE COUNTY									
453330090040001	PR-36/03E/36-0051	100SDGV	--	76-05-25	300	7.9	10.5	--	--
455459090353301	PR-40/02W/26-0027	100SDGV	100	76-05-19	150	7.8	11.5	--	--
RACINE COUNTY									
425024088115501	RA-04/19E/01-0174	350SLDL	140	76-05-27	575	7.2	16.0	--	--
425027087542601	RA-04/22E/04-0048	300SNDS	1625	76-05-26	735	7.0	14.5	--	--
RICHLAND COUNTY									
431840090203201	RI-10/01E/26-0023	300SNDS	160	76-05-25	520	7.1	10.5	--	--
431950090230401	RI-10/01E/21-0001	300SNDS	631	76-07-01	530	6.8	10.5	240	19
ROCK COUNTY									
423142089011001	RO-01/12E/24-0496	100SDGV	157	76-07-15	710	7.6	13.0	--	--
423656089023101	RD-02/12E/23-0042	100SDGV	112	76-07-15	630	7.9	14.5	--	--
424236089151101	RO-03/10E/24-0511	300SNDS	98	76-05-26	630	7.1	11.0	--	--
424358089032801	RO-03/12E/10-0451	100SDGV	104	76-07-15	550	7.5	15.5	--	--
424404089204701	RD-03/10E/07-0506	300SNDS	185	76-07-15	750	7.5	15.5	--	--
424937088464801	RD-04/14E/12-0510	300SNDS	290	76-06-03	600	7.3	11.0	350	69
RUSK COUNTY									
452119091040801	RU-33/06W/12-0056	300SNDS	109	76-08-20	380	--	11.5	190	0
452650091060001	RU-34/06W/10-0113	100SDGV	95	76-08-19	450	--	16.5	230	1
453052091035901	RU-35/06W/13-0067	100SDGV	38	76-08-19	125	--	14.5	46	7
453231091064401	RU-35/06W/04-0079	4008CPX	79	76-09-22	310	--	11.0	150	0
SAUK COUNTY									
431427089483001	SK-09/06E/20-0145	100SDGV	11	76-02-26	260	6.5	8.0	130	7
431441089485101	SK-09/06E/20-0146	100SDGV	7.5	76-05-19	330	6.1	11.0	130	50
431553090093301	SK-09/06E/20-0146	100SDGV	7.5	76-02-26	650	6.7	4.0	330	16
431553090093301	SK-09/03E/08-0136	300SNDS	114	76-05-19	550	7.0	11.0	270	8
431600089434101	SK-09/06E/12-0010	300SNDS	532	76-08-13	640	7.7	11.5	--	--
431612089445301	SK-09/06E/11-0147	100SDGV	94	76-08-03	460	7.6	10.0	230	46
432043089460301	SK-10/06E/15-0011	300SNDS	625	76-08-13	420	7.7	13.5	--	--
432545089435001	SK-11/06E/24-0039	100SDGV	375	76-06-03	215	7.8	18.0	120	--
SAWYER COUNTY									
453926090442701	SW-37/03W/27-0008	100SDGV	72	76-09-02	410	7.7	9.0	--	--
454131091215601	SW-37/08W/09-0081	100SDGV	114	76-05-19	300	7.1	13.5	--	--
454334091293401	SW-38/09W/33-0033	100SDGV	61	76-05-19	230	8.1	11.5	--	--
460501090591901	SW-42/05W/28-0080	100SDGV	32	76-08-31	215	8.3	9.0	--	--
SHAWANO COUNTY									
444642088291401	SH-27/16E/36-0029	300SNDS	450	76-07-29	640	7.4	9.0	290	29
444951088334201	SH-27/16E/09-0028	100SDGV	152	76-07-29	250	8.1	9.0	68	0
445221089125201	SH-28/11E/30-0023	4008CPX	401	76-07-30	460	7.6	10.0	240	4
445222089125201	SH-28/11E/30-0022	100SDGV	21	76-07-30	640	7.4	9.5	280	44
SHEBOYGAN COUNTY									
434324088090601	SB-15/20E/31-0059	350SLDL	352	76-06-08	530	--	9.5	--	--
TAYLOR COUNTY									
452112090471701	TA-33/03W/07-0011	100SDGV	48	76-05-18	340	7.4	8.5	--	--
TREMPEALEAU COUNTY									
440019091254001	TR-18/09W/26-0002	100SDGV	126	76-06-04	330	7.5	11.0	160	32
440023091262801	TR-18/09W/27-0016	300SNDS	340	76-06-04	660	7.0	12.0	310	76

QUALITY OF GROUND WATER

579

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
PRICE COUNTY											
453330090040001	76-05-25	--	--	--	--	--	--	--	--	--	--
455459090353301	76-05-19	--	--	--	--	--	--	--	--	--	--
RACINE COUNTY											
425024088115501	76-05-27	--	--	--	--	--	--	--	--	--	--
425027087542601	76-05-26	--	--	--	--	--	--	--	--	--	--
RICHLAND COUNTY											
431840090203201	76-05-25	--	--	--	--	--	--	--	--	--	--
431950090230401	76-07-01	50	27	1.1	1	.0	.8	264	0	217	67
ROCK COUNTY											
423142089011001	76-07-15	--	--	--	--	--	--	--	--	--	--
423656089023101	76-07-15	--	--	--	--	--	--	--	--	--	--
424236089151101	76-05-26	--	--	--	--	--	--	--	--	--	--
424358089032801	76-07-15	--	--	--	--	--	--	--	--	--	--
424404089204701	76-07-15	--	--	--	--	--	--	--	--	--	--
424937088464801	76-06-03	75	40	5.9	4	.1	.9	345	0	283	28
RUSK COUNTY											
452119091040801	76-08-20	48	18	7.7	8	.2	.9	243	--	199	--
452650091060001	76-08-19	64	17	5.2	5	.2	1.4	279	--	229	--
453052091035901	76-08-19	12	4.0	3.0	12	.2	.7	48	--	39	--
453231091064401	76-09-22	37	13	8.4	11	.3	1.8	198	--	162	--
SAUK COUNTY											
431427089483001	76-02-26	28	15	3.0	5	.1	.7	152	0	125	77
	76-05-19	26	15	4.4	7	.2	.9	94	0	77	119
431441089485101	76-02-26	72	36	2.3	2	.1	.7	380	0	312	121
	76-05-19	60	30	1.7	1	.0	.9	324	0	266	52
431553090093301	76-08-13	--	--	--	--	--	--	--	--	--	--
431600089434101	76-08-13	--	--	--	--	--	--	--	--	--	--
431612089445301	76-08-03	46	27	2.9	3	.1	.6	219	0	180	8.8
432043089460301	76-08-13	--	--	--	--	--	--	--	--	--	--
432545089435001	76-06-03	26	14	2.3	4	.1	1.0	--	0	--	--
SAWYER COUNTY											
453926090442701	76-09-02	--	--	--	--	--	--	--	--	--	--
454131091215601	76-05-19	--	--	--	--	--	--	--	--	--	--
454334091293401	76-05-19	--	--	--	--	--	--	--	--	--	--
460501090591901	76-08-31	--	--	--	--	--	--	--	--	--	--
SHAWANO COUNTY											
444642088291401	76-07-29	66	31	1.5	1	.0	.6	321	0	263	20
444951088334201	76-07-29	12	9.3	23	42	1.2	1.1	131	0	107	1.7
445221089125201	76-07-30	56	25	11	9	.3	2.6	291	0	239	12
445222089125201	76-07-30	65	29	3.7	3	.1	1.5	290	0	238	18
SHEBOYGAN COUNTY											
434324088090601	76-06-08	--	--	--	--	--	--	--	--	--	--
TAYLOR COUNTY											
452112090471701	76-05-18	--	--	--	--	--	--	--	--	--	--
TREMPEALEAU COUNTY											
440019091254001	76-06-04	42	13	2.0	3	.1	.6	154	0	126	7.8
440023091262801	76-06-04	79	27	15	9	.4	2.5	283	0	232	45

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)
PRICE COUNTY											
453330090040001	76-05-25	--	--	--	--	--	--	--	--	--	--
455459090353301	76-05-19	--	--	--	--	--	--	--	--	--	--
RACINE COUNTY											
425024088115501	76-05-27	--	--	--	--	--	--	--	--	--	--
425027087542601	76-05-26	--	--	--	--	--	--	--	--	--	--
RICHLAND COUNTY											
431840090203201	76-05-25	--	--	--	--	--	--	--	--	--	--
431950090230401	76-07-01	17	1.5	.1	11	225	240	.25	1.1	.00	.00
ROCK COUNTY											
423142089011001	76-07-15	--	--	--	--	--	--	--	--	--	--
423656089023101	76-07-15	--	--	--	--	--	--	--	--	--	--
424236089151101	76-05-26	--	--	--	--	--	--	--	--	--	--
424358089032801	76-07-15	--	--	--	--	--	--	--	--	--	--
424404089204701	76-07-15	--	--	--	--	--	--	--	--	--	--
424937088464801	76-06-03	36	16	.1	14	430	393	7.9	35	.03	.10
RUSK COUNTY											
452119091040801	76-08-20	2.6	.7	.3	5.4	227	205	.01	.04	.01	.03
452650091060001	76-08-19	4.3	1.0	.2	37	295	279	.00	.00	.01	.03
453052091035901	76-08-19	2.6	2.8	.1	25	87	83	2.0	8.0	.01	.03
453231091064401	76-09-22	2.9	2.9	.4	17	170	182	.02	.09	.00	.00
SAUK COUNTY											
431427089483001	76-02-26	5.6	5.9	.1	18	156	159	.03	.13	.03	.10
	76-05-19	53	7.4	.1	30	205	193	.05	.22	.01	.03
431441089485101	76-02-26	17	1.4	.2	13	315	330	.00	.00	.01	.03
	76-05-19	13	3.2	.1	13	280	282	.06	.27	.01	.03
431553090093301	76-08-13	--	--	--	--	--	--	--	--	--	--
431600089434101	76-08-13	--	--	--	--	--	--	--	--	--	--
431612089445301	76-08-03	9.6	5.5	.1	14	255	242	6.3	28	.00	.00
432043089460301	76-08-13	--	--	--	--	--	--	--	--	--	--
432545089435001	76-06-03	16	3.4	.1	9.0	140	--	.32	1.4	.03	.10
SAWYER COUNTY											
453926090442701	76-09-02	--	--	--	--	219	--	--	--	--	--
454131091215601	76-05-19	--	--	--	--	--	--	--	--	--	--
454334091293401	76-05-19	--	--	--	--	--	--	--	--	--	--
460501090591981	76-08-31	--	--	--	--	86	--	--	--	--	--
SHAWANO COUNTY											
444642088291401	76-07-29	41	2.0	.1	15	317	317	.35	1.6	.01	.03
444951088334201	76-07-29	3.3	1.3	1.0	12	132	128	.00	.00	.01	.03
445221089125201	76-07-30	32	5.4	.6	17	297	299	1.2	5.3	.01	.03
445222089125201	76-07-30	49	4.6	.2	20	332	310	.33	1.5	.03	.10
SHEBOYGAN COUNTY											
434324088090601	76-06-08	--	--	--	--	--	--	--	--	--	--
TAYLOR COUNTY											
452112090471701	76-05-18	--	--	--	--	--	--	--	--	--	--
TREMPEALEAU COUNTY											
440019091254001	76-06-04	11	2.1	.1	22	186	191	5.0	22	.00	.00
440023091262801	76-06-04	21	59	.1	19	427	369	1.4	6.2	.01	.03

QUALITY OF GROUND WATER

581

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA (NH4) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL-NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)
PRICE COUNTY											
45330090040001	76-05-25	--	--	--	--	--	--	--	--	--	--
455459090353301	76-05-19	--	--	--	--	--	--	--	--	--	--
RACINE COUNTY											
425024068115501	76-05-27	--	--	--	--	--	--	--	--	--	--
425027087542601	76-05-26	--	--	--	--	--	--	--	--	--	--
RICHLAND COUNTY											
431640090203201	76-05-25	--	--	--	--	--	--	--	--	--	--
431950090230401	76-07-01	.25	--	.00	.00	--	.08	--	.06	--	--
RDCK COUNTY											
423142089011001	76-07-15	--	--	--	--	--	--	--	--	--	--
423656089023101	76-07-15	--	--	--	--	--	--	--	--	--	--
424236089151101	76-05-26	--	--	--	--	--	--	--	--	--	--
424358089032601	76-07-15	--	--	--	--	--	--	--	--	--	--
424404089204701	76-07-15	--	--	--	--	--	--	--	--	--	--
424937088464801	76-06-03	7.9	--	.00	.00	--	.13	--	.13	--	--
RUSK COUNTY											
452119091040801	76-08-20	.02	--	.18	.23	--	.00	--	.13	--	--
452650091060001	76-08-19	.01	--	.52	.67	--	.06	--	.56	--	--
453052091035901	76-08-19	2.0	--	.01	.01	--	.00	--	.60	--	--
453231091064401	76-09-22	.02	--	.09	.12	--	.00	--	.05	--	--
SAUK COUNTY											
431427089483001	76-02-26	.06	--	--	--	--	--	.38	--	.23	.71
	76-05-19	.06	.07	--	--	.33	--	.40	--	.19	.58
431441089485101	76-02-26	.01	--	--	--	--	--	.06	--	.16	.49
	76-05-19	.07	.01	--	--	.27	--	.28	--	.13	.40
431553090093301	76-08-13	--	--	--	--	--	--	--	--	--	--
431600089434101	76-08-13	--	--	--	--	--	--	--	--	--	--
431612089445301	76-08-03	6.3	--	.00	.00	--	.05	--	.05	--	--
432043089460301	76-08-13	--	--	--	--	--	--	--	--	--	--
432545069435001	76-06-03	.35	--	.00	.00	--	.10	--	.10	--	--
SAWYER COUNTY											
453926090442701	76-09-02	--	--	--	--	--	--	--	--	--	--
454131091215601	76-05-19	--	--	--	--	--	--	--	--	--	--
454334091293401	76-05-19	--	--	--	--	--	--	--	--	--	--
460501090591901	76-08-31	--	--	--	--	--	--	--	--	--	--
SHAWANO COUNTY											
444442068291401	76-07-29	.36	--	.01	.01	--	.09	--	.10	--	--
444951086334201	76-07-29	.01	--	.06	.08	--	.00	--	.05	--	--
445221089125201	76-07-30	1.2	--	.01	.01	--	.17	--	.18	--	--
445222089125201	76-07-30	.36	--	.04	.05	--	.16	--	.20	--	--
SHEBOYGAN COUNTY											
434324068090601	76-06-68	--	--	--	--	--	--	--	--	--	--
TAYLOR COUNTY											
452112090471701	76-05-18	--	--	--	--	--	--	--	--	--	--
TREMPEALEAU COUNTY											
440019091254001	76-06-04	5.0	--	.01	.01	--	.00	--	.00	--	--
440023091262801	76-06-04	1.4	--	.02	.03	--	.21	--	.23	--	--

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED-PHOSPHORUS (P) (MG/L)	DIS-SOLVED-ALUMINUM (AL) (UG/L)	DIS-SOLVED-ARSENIC (AS) (UG/L)	DIS-SOLVED-BORON (B) (UG/L)	DIS-SOLVED-CADMIUM (CD) (UG/L)	DIS-SOLVED-CHROMIUM (CR) (UG/L)	DIS-SOLVED-COBALT (CO) (UG/L)	DIS-SOLVED-COPPER (CU) (UG/L)	DIS-SOLVED-IRON (FF) (UG/L)	DIS-SOLVED-LEAD (PB) (UG/L)
PRICE COUNTY											
453330090040001	76-05-25	--	--	0	--	0	<10	0	0	--	3
455459090353301	76-05-19	--	--	0	--	2	<10	0	0	--	36
RACINE COUNTY											
425024088115501	76-05-27	--	--	5	--	2	<10	0	0	--	4
425027087542601	76-05-26	--	--	1	--	0	10	0	0	--	2
RICHLAND COUNTY											
431840090203201	76-05-25	--	--	0	--	0	<10	0	10	--	3
431950090230401	76-07-01	.01	--	0	20	0	--	1	0	90	1
ROCK COUNTY											
423142089011001	76-07-15	--	--	0	--	1	<10	0	0	--	5
423656089023101	76-07-15	--	--	0	--	1	<10	0	10	--	4
424236089151101	76-05-26	--	--	0	--	0	<10	0	0	--	1
424358089032801	76-07-15	--	--	5	--	1	<10	0	10	--	4
424404089204701	76-07-15	--	--	4	--	3	<10	1	10	--	5
424937088464601	76-06-03	.01	--	0	10	0	--	1	10	20	3
RUSK COUNTY											
452119091040801	76-08-20	.20	--	2	40	0	--	0	0	850	3
452650091060001	76-08-19	.02	--	0	50	0	--	0	0	9600	3
453052091035901	76-08-19	.03	--	0	10	0	--	0	180	30	4
453231091064401	76-09-22	.05	--	2	--	2	--	0	0	490	2
SAUK COUNTY											
431427089483001	76-02-26	--	--	--	--	--	--	--	--	7200	--
	76-05-19	--	--	--	--	--	--	--	--	9900	--
431441089485101	76-02-26	--	--	--	--	--	--	--	--	70	--
	76-05-19	--	--	--	--	--	--	--	--	60	--
431553090093301	76-08-13	--	--	--	--	--	--	--	20	--	3
431600089434101	76-08-13	--	--	--	--	--	--	--	20	--	3
431612089445301	76-08-03	.02	--	1	10	0	--	0	0	10	1
432043089460301	76-08-13	--	--	--	--	--	--	--	10	--	2
432545089435001	76-06-03	.02	--	0	20	0	--	0	0	0	2
SAWYER COUNTY											
453926090442701	76-09-02	--	--	--	--	--	--	--	10	--	1
454131091215601	76-05-19	--	--	2	--	1	<10	0	0	--	41
454334091293401	76-05-19	--	--	1	--	0	10	2	0	--	62
460501090591901	76-08-31	--	--	--	--	--	--	--	0	--	4
SHAWANO COUNTY											
444642088291401	76-07-29	.02	--	0	10	0	--	2	0	20	3
444951088334201	76-07-29	.03	--	9	90	2	--	0	0	20	9
445221089125201	76-07-30	.03	--	11	140	1	--	0	0	10	2
445222089125201	76-07-30	.04	--	0	150	0	--	1	10	10	1
SHEBOYGAN COUNTY											
434324088090601	76-06-08	--	--	0	--	0	<10	0	10	--	2
TAYLOR COUNTY											
452112090471701	76-05-18	--	--	1	--	0	10	0	0	--	4
TREMPEALEAU COUNTY											
440019091254001	76-06-04	.10	--	5	10	0	--	0	10	10	2
440023091262801	76-06-04	.01	--	0	30	1	--	1	10	220	2

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED SEL- NIUM (SE) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
PRICE COUNTY											
453330090040001	76-05-25	--	--	<.5	0	0	0	50	1.1	--	--
455459090353301	76-05-19	--	--	--	27	0	1	370	3.8	--	--
RACINE COUNTY											
425024088115501	76-05-27	--	--	<.5	5	0	0	40	1.4	--	--
425027087542601	76-05-26	--	--	<.5	1	0	0	40	.9	--	--
RICHLAND COUNTY											
431840090203201	76-05-25	--	--	<.5	0	0	0	90	6.2	--	--
431950090230401	76-07-01	0	<.5	--	--	0	0	10	--	--	.0
ROCK COUNTY											
423142089011001	76-07-15	--	--	<.5	6	0	0	20	--	--	--
423656089023101	76-07-15	--	--	<.5	3	1	0	50	--	--	--
424236089151101	76-05-26	--	--	<.5	0	0	0	480	5.8	--	--
424358089032801	76-07-15	--	--	<.5	1	0	0	60	--	--	--
424404089204701	76-07-15	--	--	<.5	12	0	0	2200	--	--	--
424937088464801	76-06-03	0	<.5	--	--	0	0	20	--	--	.2
RUSK COUNTY											
452119091040801	76-08-20	200	<.5	--	--	0	0	100	--	5.8	.0
452650091060001	76-08-19	430	<.5	--	--	0	0	210	--	14	.0
453052091035901	76-08-19	0	<.5	--	--	0	0	260	--	3.8	.1
453231091064401	76-09-22	80	<.5	--	--	0	0	250	--	--	.0
SAUK COUNTY											
431427089483001	76-02-26	160	--	--	--	--	--	--	--	8.2	--
	76-05-19	150	--	--	--	--	--	--	--	3.6	--
431441089485101	76-02-26	60	--	--	--	--	--	--	--	2.8	--
	76-05-19	40	--	--	--	--	--	--	--	4.1	--
431553090093301	76-08-13	--	--	--	--	--	--	90	11	--	--
431600089434101	76-08-13	--	--	--	--	--	--	40	6.8	--	--
431612089445301	76-08-03	0	<.5	--	--	1	0	10	--	--	.1
432043089460301	76-08-13	--	--	--	--	--	--	120	7.1	--	--
432545089435001	76-06-03	0	<.5	--	--	0	0	20	--	3.5	.0
SAWYER COUNTY											
453926090442701	76-09-02	--	--	--	--	--	--	40	4.3	--	--
454131091215601	76-05-19	--	--	--	10	0	0	300	6.7	--	--
454334091293401	76-05-19	--	--	--	9	0	1	0	3.0	--	--
460501090591901	76-08-31	--	--	--	--	--	--	0	5.9	--	--
SHAWANO COUNTY											
444642088291401	76-07-29	10	<.5	--	--	2	0	0	7.0	--	.0
444951088334201	76-07-29	0	<.5	--	--	1	0	0	1.4	--	.0
445221089125201	76-07-30	10	<.5	--	--	0	0	160	45	--	.0
445222089125201	76-07-30	100	<.5	--	--	0	0	350	--	--	.4
SHEBOYGAN COUNTY											
434324088090601	76-06-08	--	--	<.5	1	0	0	30	.8	--	--
TAYLOR COUNTY											
452112090471701	76-05-18	--	--	--	1	0	1	200	1.4	--	--
TREMPEALEAU COUNTY											
440019091254001	76-06-04	0	<.5	--	--	0	0	10	--	.9	.1
440023091262801	76-06-04	20	<.5	--	--	0	0	30	--	5.7	.1

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	LOCAL IDENTIFIER	AQUIFER	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPECIFIC CONDUCTANCE (MICROHMS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
VERNON COUNTY									
433126091125401	VE-12/07W/09-0072	100SDGV	117	76-06-04	560	7.5	11.0	290	0
433126091125402	VE-12/07W/09-0036	300SNDS	635	76-06-04	640	7.4	12.0	330	10
433150091000801	VE-12/05W/08-0094	350SLDL	330	76-06-04	480	7.5	11.0	270	12
433509090383701	VE-13/03W/20-0109	300SNDS	190	76-06-10	405	7.5	9.5	--	--
434331090361601	VE-14/02W/34-0110	300SNDS	200	76-06-10	250	5.1	13.5	--	--
VILAS COUNTY									
455615089033801	VI-40/11E/24-0040	100SDGV	82	76-05-26	100	6.5	8.0	--	--
460108069352001	VI-41/07E/23-0066	100SDGV	6.0	76-02-19	60	5.0	2.0	11	0
460114089352001	VI-41/07E/23-0065	100SDGV	7.0	76-02-19	30	5.0	.5	4	0
460340069384301	VI-41/07E/05-0059	100SDGV	31	76-02-10	110	7.2	5.0	42	25
				76-05-27	170	7.5	8.0	46	0
460345089331201	VI-41/08E/06-0064	100SDGV	8.0	76-02-18	82	5.5	1.0	9	2
460345089331301	VI-41/07E/01-0001SP	--	--	76-02-18	39	5.3	.0	6	1
				76-05-25	23	6.0	12.5	8	4
460345089331601	VI-41/07E/01-0062	100SDGV	8.0	76-02-18	39	5.0	.0	3	3
				76-05-25	15	4.0	7.3	14	14
460346089384001	VI-41/07E/05-0060	100SDGV	7.0	76-02-10	150	6.9	3.5	44	5
460350089331101	VI-41/08E/06-0063	100SDGV	7.0	76-02-18	60	5.3	1.0	12	4
460406089315401	VI-42/08E/31-0061	100SDGV	6.0	76-02-10	190	6.0	5.0	48	9
				76-05-27	255	6.0	9.0	45	34
WALWORTH COUNTY									
423025086201401	WW-01/18E/35-0263	350SLDL	250	76-06-02	560	6.8	12.6	--	--
423145066182301	WW-01/18E/24-0128	100SDGV	95	76-08-04	1000	7.4	10.5	410	11
423529086441001	WW-02/15E/33-0129	300SNDS	1404	76-08-04	650	7.3	12.0	310	0
424406066294301	WW-03/17E/09-0366	100SDGV	220	76-06-03	760	6.7	20.5	--	--
424925066263401	WW-04/17E/12-0407	100SDGV	260	76-06-31	603	7.5	16.0	--	--
WASHBURN COUNTY									
454439091551301	WB-38/13W/25-0006	300SNDS	460	76-07-08	280	7.5	13.5	140	0
454919091532501	WB-39/12W/31-0007	100SDGV	73	76-07-06	420	7.5	12.0	150	53
WASHINGTON COUNTY									
431136066063601	WN-09/20E/34-0030	300SNDS	1302	76-06-04	700	6.7	13.8	--	--
431238086070101	WN-09/20E/27-0797	350SLDL	380	75-10-19	--	7.2	--	1760	1600
431347066063001	WN-09/20E/22-0417	350SLDL	180	76-09-02	1400	7.1	10.5	--	--
431424066224601	WN-09/18E/16-0215	362MQKS	320	75-10-17	520	8.5	12.5	160	0
432028668233601	WN-10/18E/08-0055	350SLDL	109	76-06-04	920	6.5	10.5	--	--
432727086055201	WN-12/20E/34-0370	100SDGV	117	76-09-02	620	7.4	13.0	--	--
432742086145301	WN-12/19E/32-0411	100SDGV	90	75-10-17	595	7.7	10.8	340	54
WAUKESHA COUNTY									
425913068134101	WK-06/19E/15-0125	300SNDS	2120	76-06-30	780	7.3	13.5	--	--
430540086043201	WK-07/20E/01-0229	350SLDL	385	76-06-30	1350	7.2	10.0	--	--
430642086101701	WK-08/20E/19-0050	350SLDL	86	76-09-02	725	7.1	11.0	--	--
WAUPACA COUNTY									
441544086522501	WP-21/13E/25-0723	300SNDS	140	76-06-02	290	7.7	10.0	--	--
443927088440601	WP-25/15E/07-0725	100SDGV	84	76-05-27	500	7.6	13.5	--	--
WAUSHARA COUNTY									
440203089311001	WS-18/08E/14-0011	300SNDS	390	76-06-05	340	7.6	10.0	170	11
440450088562101	WS-19/13E/34-0456	300SNDS	285	76-06-02	260	7.8	10.5	--	--
440759089311801	WS-19/08E/11-0229	100SDGV	49	76-06-05	560	7.2	10.0	260	34
441050069242301	WS-20/09E/27-0624	100SDGV	225	76-06-01	800	7.2	9.5	--	--
WINNEBAGO COUNTY									
435804088510201	WI-17/14E/08-0060	300SNDS	300	76-06-04	670	7.6	11.0	340	19
435958066502701	WI-18/14E/28-0235	300SNDS	160	76-05-28	610	7.0	10.0	--	--
440424086310401	WI-19/17E/31-0039	300SNDS	716	76-05-28	1420	7.1	10.0	--	--
441042088275401	WI-20/17E/28-0059	300SNDS	600	76-05-26	1500	6.7	10.0	--	--
441125066292201	WI-20/17E/20-0001	300SNDS	340	76-06-12	850	6.9	10.0	--	--
441352066435501	WI-20/15E/05-0118	100SDGV	61	76-05-28	690	7.3	9.5	--	--

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED-PHOSPHORUS (P) (MG/L)	DIS-SOLVED-ALUMINUM (AL) (UG/L)	DIS-SOLVED-ARSENIC (AS) (UG/L)	DIS-SOLVED-BORON (B) (UG/L)	DIS-SOLVED-CADMIUM (CD) (UG/L)	DIS-SOLVED-CHROMIUM (CR) (UG/L)	DIS-SOLVED-COBALT (CO) (UG/L)	DIS-SOLVED-COPPER (CU) (UG/L)	DIS-SOLVED-IRON (FE) (UG/L)	DIS-SOLVED-LEAD (PB) (UG/L)
VERNON COUNTY											
433126091125401	76-06-04	.01	--	0	10	0	--	0	0	0	1
433126091125402	76-06-04	.01	--	0	0	0	--	0	0	470	2
433150091000801	76-06-04	.02	--	0	20	0	--	0	10	10	3
433509090383701	76-08-10	--	--	--	--	--	--	--	10	--	2
434331090361601	76-08-10	--	--	--	--	--	--	--	2400	--	2
VILAS COUNTY											
455615089033801	76-05-26	--	--	0	--	1	<10	0	10	--	1
460108089352001	76-02-19	--	--	--	--	--	--	--	--	8400	--
460114089352001	76-02-19	--	--	--	--	--	--	--	--	640	--
460340089384301	76-02-10	--	--	--	--	--	--	--	--	160	--
	76-05-27	--	--	--	--	--	--	--	--	290	--
460345089331201	76-02-18	--	--	--	--	--	--	--	--	11000	--
460345069331301	76-02-18	--	--	--	--	--	--	--	--	170	--
	76-05-25	--	--	--	--	--	--	--	--	70	--
460345089331801	76-02-18	--	--	--	--	--	--	--	--	880	--
	76-05-25	--	--	--	--	--	--	--	--	560	--
460346089384001	76-02-10	--	--	--	--	--	--	--	--	1300	--
460350089331101	76-02-18	--	--	--	--	--	--	--	--	5600	--
460408089315401	76-02-10	--	--	--	--	--	--	--	--	9200	--
	76-05-27	--	--	--	--	--	--	--	--	11000	--
WALWORTH COUNTY											
423025088201401	76-06-02	--	--	0	--	0	<10	0	0	--	1
423145088162301	76-08-04	.22	--	1	120	1	--	0	0	1100	1
423529088441001	76-08-04	.02	--	14	20	1	--	6	0	180	0
424406088294301	76-06-03	--	--	12	--	0	<10	0	0	--	2
424925088263401	76-08-31	--	10	0	--	1	<10	5	0	--	2
WASHBURN COUNTY											
454439091551301	76-07-08	.16	--	0	10	1	--	0	10	0	6
454919091532501	76-07-08	.06	--	2	110	0	--	0	0	0	1
WASHINGTON COUNTY											
431136088063601	76-06-04	--	--	0	--	0	20	0	0	--	2
431238088070101	75-10-19	--	--	--	--	--	--	--	--	--	--
431347088063001	76-09-02	--	10	1	--	1	<10	0	10	--	0
431424088224801	75-10-17	--	--	--	--	--	--	--	--	510	--
432028088233801	76-06-04	--	--	0	--	1	<10	0	10	--	4
432727088055201	76-09-02	--	60	1	--	1	<10	6	20	--	0
432742088145301	75-10-17	--	--	--	--	--	--	--	--	100	--
WAUKESHA COUNTY											
425913088134101	76-08-30	--	10	0	--	1	<10	5	10	--	0
430540088043201	76-08-30	--	10	1	--	1	<10	4	10	--	0
430842088101701	76-09-02	--	10	0	--	1	<10	14	0	--	0
WAUPACA COUNTY											
441544088522501	76-06-02	--	--	2	--	0	<10	0	0	--	1
443927088440601	76-05-27	--	--	0	--	1	<10	0	0	--	3
WAUSHARA COUNTY											
440203089311001	76-06-05	.03	--	0	0	0	--	0	0	0	1
440450088562101	76-06-02	--	--	1	--	0	<10	0	0	--	1
440759089311801	76-06-05	.02	--	0	40	0	--	0	0	10	2
441050089242301	76-06-01	--	--	0	--	0	<10	0	0	--	1
WINNEBAGO COUNTY											
435804088510201	76-06-04	.01	--	0	10	0	--	1	0	10	1
435958088502701	76-05-28	--	--	0	--	0	<10	3	0	--	2
440424088310401	76-05-28	--	--	0	--	0	<10	0	10	--	1
441042088275401	76-05-28	--	--	0	--	0	10	0	10	--	4
441125088292201	76-08-12	--	--	--	--	--	--	--	330	--	20
441352088435501	76-05-28	--	--	0	--	0	<10	0	0	--	1

QUALITY OF GROUND WATER

589

WATER QUALITY DATA: WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED MAN-GANESE (MG/L)	TOTAL MERCURY (UG/L)	DIS-SOLVED MERCURY (MG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBDN (C) (MG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
VERNON COUNTY											
433126091125401	76-06-04	0	<.5	--	--	0	0	0	--	3.1	.1
433126091125402	76-06-04	20	<.5	--	--	0	0	10	--	3.4	.0
433150091000801	76-06-04	0	<.5	--	--	0	0	200	--	.1	.0
433509090383701	76-08-10	--	--	--	--	--	--	20	1.8	--	--
434331090361601	76-08-10	--	--	--	--	--	--	2100	11	--	--
VILAS COUNTY											
455615089033801	76-05-26	--	--	<.5	1	0	0	840	3.0	--	--
460108089352001	76-02-19	50	--	--	--	--	--	--	--	30	--
460114089352001	76-02-19	20	--	--	--	--	--	--	--	17	--
460340089384301	76-02-10	60	--	--	--	--	--	--	--	12	--
	76-05-27	70	--	--	--	--	--	--	--	17	--
460345089331201	76-02-18	70	--	--	--	--	--	--	--	43	--
460345089331301	76-02-18	110	--	--	--	--	--	--	--	7.9	--
	76-05-25	50	--	--	--	--	--	--	--	8.6	--
460345089331801	76-02-18	40	--	--	--	--	--	--	--	13	--
	76-05-25	30	--	--	--	--	--	--	--	17	--
460346089384001	76-02-10	50	--	--	--	--	--	--	--	9.7	--
460350089331101	76-02-18	60	--	--	--	--	--	--	--	21	--
460408089315401	76-02-10	90	--	--	--	--	--	--	--	13	--
	76-05-27	90	--	--	--	--	--	--	--	11	--
WALWORTH COUNTY											
423025088201401	76-06-02	--	--	<.5	1	0	0	100	1.0	--	--
423145088182301	76-08-04	60	<.5	--	--	0	0	0	--	--	.0
423529088441001	76-08-04	30	<.5	--	--	0	0	60	2.4	--	.0
424406088294301	76-06-03	--	--	<.5	3	0	0	20	4.9	--	--
424925088263401	76-08-31	130	--	--	6	--	0	100	4.0	--	--
WASHBURN COUNTY											
454439091551301	76-07-08	0	<.5	--	--	0	0	50	--	6.9	.0
454919091532501	76-07-08	110	<.5	--	--	0	0	10	--	3.1	.0
WASHINGTON COUNTY											
431136088063601	76-06-04	--	--	<.5	0	0	0	160	.1	--	--
431238088070101	75-10-19	--	--	--	--	--	--	--	--	--	--
431347088063001	76-09-02	20	--	--	0	--	0	150	2.2	--	--
431424088224801	75-10-17	20	--	--	--	--	--	--	--	--	--
432028088233801	76-06-04	--	--	<.5	0	0	0	290	1.8	--	--
432727088055201	76-09-02	0	--	--	14	--	0	20	10	--	--
432742088145301	75-10-17	40	--	--	--	--	--	--	--	--	--
WAUKESHA COUNTY											
425913088134101	76-08-30	20	--	--	0	--	0	10	2.6	--	--
430540088043201	76-08-30	30	--	--	7	--	0	30	4.5	--	--
430842088101701	76-09-02	540	--	--	0	--	0	90	5.4	--	--
WAUPACA COUNTY											
441544088522501	76-06-02	--	--	<.5	0	0	0	10	6.5	--	--
443927088440601	76-05-27	--	--	--	1	0	0	40	5.6	--	--
WAUSHARA COUNTY											
440203089311001	76-06-05	0	<.5	--	--	0	0	10	--	5.5	.1
440450088562101	76-06-02	--	--	<.5	0	0	0	0	4.8	--	--
440759089311801	76-06-05	0	<.5	--	--	0	0	10	--	4.6	.1
441050089242301	76-06-01	--	--	<.5	0	0	0	40	6.2	--	--
WINNEBAGO COUNTY											
435804088510201	76-06-04	160	<.5	--	--	0	0	40	--	3.6	.1
435958088502701	76-05-28	--	--	<.5	3	0	0	20	5.0	--	--
440424088310401	76-05-28	--	--	<.5	0	0	0	20	4.4	--	--
441042088275401	76-05-28	--	--	<.5	1	0	0	50	6.2	--	--
441125088292201	76-08-12	--	--	--	--	--	--	880	4.4	--	--
441352088435501	76-05-28	--	--	<.5	1	0	0	20	7.8	--	--

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FACTORS FOR CONVERTING ENGLISH UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the English units published herein to the International System of Units (SI). Subsequent reports will contain both the English and SI unit equivalents in the station manuscript descriptions until such time that all data will be published in SI units.

Multiply English units	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1	millimeters (mm)
	2.54×10^2	meters (m)
feet (ft)	3.048×10^1	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3	square meters (m ²)
	4.047×10^1	*hectares (ha)
	4.047×10^1	square hectometers (hm ²)
	4.047×10^3	square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0	**liters (l)
	3.785×10^0	cubic decimeters (dm ³)
	3.785×10^{-3}	cubic meters (m ³)
million gallons (10 ⁶ gal)	3.785×10^3	cubic meters (m ³)
	3.785×10^{-3}	cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1	cubic decimeters (dm ³)
	2.832×10^2	cubic meters (m ³)
cfs-days [(ft ³ /s) · d]	2.447×10^3	cubic meters (m ³)
	2.447×10^3	cubic hectometers (hm ³)
acre-feet (acre-ft)	1.233×10^3	cubic meters (m ³)
	1.233×10^{-3}	cubic hectometers (hm ³)
	1.233×10^{-6}	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1	liters per second (l/s)
	2.832×10^1	cubic decimeters per second (dm ³ /s)
	2.832×10^2	cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^2	liters per second (l/s)
	6.309×10^2	cubic decimeters per second (dm ³ /s)
	6.309×10^{-5}	cubic meters per second (m ³ /s)
million gallons per day (mgal/d)	4.381×10^1	cubic decimeters per second (dm ³ /s)
	4.381×10^2	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^1	tonnes (t)

*The unit hectare is approved for use with the International System (SI) for a limited time. See NBS Special Bulletin 330, p.15, 1972 edition.

**The unit liter is accepted for use with the International System (SI). See NBS Special Bulletin 330, p. 13, 1972 edition.

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